# Cultural Transmission in Mexican American Families:

# Considering Youth's Active Role in their Cultural Development

by

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A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Approved March 2012 by the
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May 2012

ABSTRACT

The adaptation and integration of the mainstream and ethnic culture are important processes to understand as they have been associated with immigrant and minority youth's adjustment and family dynamics. However, few studies focusing on youth's cultural experiences have explored youth's active role in their own cultural development, and even less have explored youth's role in influencing parents' cultural development. In the current dissertation, two studies addressed these issues by using a within-family longitudinal design to explore 246 Mexican American youth's role in their own and their families' cultural development. The first study examined the reciprocal associations in parents' and two offspring's cultural values to examine developmental differences in parent-youth socialization processes. Overall, the importance of mothers' values was highlighted as a significant predictor of increases in youths' values, five years later. In addition, Study 1 highlighted situations where youth play an active role in their parents' cultural development as youths' lower endorsement of respect for elders values was associated with increases in fathers' value endorsement, five years later. The second study explored the associations between youth's imitation and de-identification from parents and parent-youth incongruence in Mexican and Anglo cultural orientations. Youths' active role in their cultural development was underscored, as youths' reports of de-identifying from parents were linked to more incongruence in parent-youth Anglo orientations. Further, important family characteristics (i.e., parent-youth warmth and demographic similarities) were shown to predict youths' more imitation and less de-identification from parents.

ACKNOWLEDGMENTS

The completion of my graduate degree and dissertation could not have been possible without the help and support of my academic advisors, family, and friends. First, I would like to thank my doctoral advisor, Kimberly Updegraff, for the unwavering support and fastidious mentorship throughout my intellectual and professional development. In addition, I would like to thank my Master's advisor, Jeff Cookston, who encouraged me to pursue my career and academic interests. Both have been my greatest cheerleaders throughout this process and I am forever grateful. I would also like to thank my committee members, Adriana Umaña-Taylor, Larry Dumka, and Jennifer Glick. Each has provided wonderful insights that have helped push me as a scholar and helped strengthen this dissertation.

I am also grateful to my friends and colleagues from the Juntos Project who joined me in the trenches of data collection and were always there to share ideas. Similarly, I would like to thank my friends for the support and patience when I disappeared for weeks to study, write, and complete my academic tasks. Finally, I would like to thank my family, in particular my mother and sister, my partner Nicholas Bishop, and my uncle Steve, for providing invaluable instrumental and emotional support throughout this process. The joy of having such a loving and accommodating family helped me push through this process while also developing and strengthening my family relationships. In that way, I have come out of this experience with more than I could have dreamed. Thank you!

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## INTRODUCCION

For Mexican American families, a prominent ethnic minority group in the US (US Census 2011), cultural transmission and internalization is a salient task for parents and youth as family members' cultural development has implications for family dynamics (Birman 2006) and psychosocial adjustment (Gonzales, Knight, Morgan-Lopez, Saenz, & Sirolli, 2002). Theoretical (Berry, 1990) and empirical work (Portes & Rumbaut, 2001) focused on the integration and adaptation of two cultures has made great strides in our understanding of the processes associated with cultural development. First, researchers have noted that the integration of one culture does not occur at the loss of another, but instead both cultures can be integrated and adapted independent from one another (Berry 1990; 2007). In addition, scholars recognize that culture is a multi-dimensional construct that is comprised of cultural values, behaviors and identity (Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Finally, researchers have noted the prominent role of parents (Hughes, Rodriguez, Smith, Johnson, Stevenson, & Spicer, 2006) and societal structures (e.g., school, media; Harris, 2002) in socializing youth.

The study of cultural development offers great insights into the cultural experiences of ethnic minority and immigrant families; however, some research questions remain to be answered. First, research has generally ignored adolescents' active participation in their cultural socialization. One exception is research on ethnic identity, which has highlighted youth's active role in exploring their culture in order to come to terms with and decide on their ethnic identity

(Phinney, 1990; Umaña-Taylor & Fine, 2004). Such research highlights the importance of understanding youth's active role in their cultural experiences, such as the development of their cultural values and cultural orientations. Next, cross-sectional research has been the primary methodological approach when exploring immigrant families' cultural integration; thus, much is known in terms of cultural *differences* between immigrant and non-immigrant families but little is known about *changes* in cultural development within families of different immigrant statuses (Fuligni, 2001; Sam, 2006; Updegraff et al, in press). The present study aims to extend previous research on cultural development by focusing on the longitudinal processes associated with cultural development and youths' active role in their own cultural development in two distinct papers.

The first paper aims to explore the longitudinal intergenerational transmission of cultural values (i.e., familism and respect for elders values) between Mexican American parents (i.e., mothers and fathers) and their offspring (i.e., younger and older adolescents). Previous research has noted developmental differences in parent-youth socialization strategies, such that parents may use more authoritarian (i.e., vertical) socialization strategies with early to middle adolescent offspring, and parents may use more egalitarian (i.e., horizontal) socialization strategies with emerging adult and adult offspring (Berry, 2007; Grusec & Hastings, 2007). Information from two siblings is used to examine developmental differences in the process of intergenerational cultural transmission longitudinally over a five-year period. Further, previous research has noted that shared socio-cultural experiences, as would be the case when parents

and youth come from similar immigrant backgrounds, help enculturate intergenerational value similarities (Glass, Bengston, & Dunham, 1986; Vedder, Berry, Sabatier, & Sam, 2009; Vollebergh, Iedema, & Raaijmakers, 2001); therefore, differences will also be explored for parent-offspring dyads who have similar versus different immigrant statuses.

The second paper aims to explore the process of Mexican-origin adolescents' imitation and de-identification from parents and its association with parent-youth cultural incongruence. Current research and theoretical work on parent-youth cultural incongruence has noted the importance on cultural incongruence for parents' and adolescents' psychosocial adjustment and family functioning, but few studies consider youth's active role in such processes (Telzer, 2010). Social learning theory (Mischel, 1966) and socialization research (Kuczynski & Hildebrandt, 1997) underlie the study goals to link (1) parent-youth relationship qualities and similarities to Mexican American youth's reports of imitation or de-identification from their parents and (2) youth's reports of imitation or de-identification from parents to parent-youth cultural incongruence in Mexican and Anglo orientations.

The two studies are complimentary in their focus on the processes associated with parent-youth cultural transmission and the concurrent focus on development and cultural background. First, each paper tackles a different aspect associated with parent-youth cultural transmission, including the direction of parent-youth cultural transmission in the first paper and the associations between youths' imitation and de-identification and parent-youth cultural incongruence in

the second paper. Second, each paper uses a longitudinal within-family design to explore how cultural transmission processes differ for youth who are transitioning from early to late adolescence (younger siblings) and mid/late adolescence to emerging adulthood (older siblings) in addition to exploring how parent-youth dyads from different immigrant backgrounds differ in the processes of cultural transmission.

## STUDY 1 - Transmission of Cultural Values among Mexican American Parents and their Adolescent and Emerging Adult Offspring

Cultural transmission, the process of carrying cultural information from one generation to the next or from one group to another group, has significant implications for the adaptation and persistence of a culture (Schönpflug, 2009) and for relationship dynamics within families (Denniss, Basanez & Farahmand, 2010; Padilla, 2006). The process of cultural transmission is particularly important to understand in the context of Mexican American families, as this population is faced with the task of integrating and transmitting two cultures, the Mexican and American culture. Mexican Americans comprise 10 percent of the US population and 66% of the total Hispanic population residing in the US (US Census, 2011); thus, understanding the process of intergenerational cultural transmission has strong implications for the adaptation and integration of a large proportion of the US population.

Cultural transmission is theorized to occur within the family and through social and community systems. First, parents are conceptualized as the primary socialization agents of many of the core values that their children internalize during adolescence and emerging adulthood (Grusec & Godnow, 1994). Importantly, socialization strategies are likely to differ across children's developmental stages (Berry, 2007; Grusec & Hastings, 2007). In particular, parents are theorized to utilize more authoritarian (i.e., vertical) socialization strategies for young children and youth in early to middle adolescence, and parents may use more egalitarian (i.e., horizontal) socialization strategies with

emerging adult and adult children. Second, cultural values are also socialized through various societal systems; therefore, similarities in cultural values amongst parents and their children can also come about through shared socioeconomic and cultural experiences, a process called status inheritance (Glass, Bengston, & Dunham, 1986; Hitlin, 2006; Vollebergh, Iedema, & Raaijmakers, 2001). When parents and their children share similar social and cultural experiences, the shared experiences help enculturate intergenerational value similarities; but when parents and their children do not share similar experiences, as may be the case when immigrant parents raise US-born children, then parents may no longer share formative experiences, thus reducing the amount of intergenerational value similarities found amongst family members (Kwak, 2003; Phinney & Vedder, 2006; Vedder, Berry, Sabatier, & Sam, 2009).

The goal of this study was to explore the bidirectional associations between parents' (i.e., mothers' and fathers') and offsprings' (i.e., younger and older adolescents') cultural values in Mexican American families, focusing on two key cultural values: familism and respect for elders. These two values have been noted as salient during the process of dual cultural adaptation of Mexican American families (Knight et al., 2010). Using a longitudinal within-family design, this study examines reciprocal associations in parents' and two offsprings' cultural values to test whether intergenerational relations between parents' and youths' cultural values differed for youth transitioning from early to late adolescence and their older siblings transitioning from mid/late adolescence to young adulthood. Drawing from research on status inheritance (Glass et al.,

1986), the second goal was to examine how parent-youth immigration status, defined by intergenerational similarity or difference, moderated the associations between parents' and their offsprings' cultural values.

**Transmission of Cultural Values within the Context of Mexican American Families**

A key aspect of culture transmitted from one generation to the next is a culture's value system (Schwartz et al., 2010). Values provide a sense of meaning to everyday social relations as well as a framework from which to understand everyday life (Chase-Lansdale, Deangelo, & Palacios, 2007). They provide individuals with a sense of what are appropriate and inappropriate behaviors; they guide future actions; and they aid in the interpretation of present and past experiences (Roosa, Morgan-Lopez, Cree, & Spencer, 2002). Cultural values, in particular, are values specific to members of a group who hold similar ethnic backgrounds, historical experiences, or social experiences (Glass et al., 1986; Roosa et al., 2002). Through these shared experiences, individuals within a culture may utilize similar adjustment patterns and, as a consequence, develop similar value systems.

Research by Knight and colleagues (2010) has highlighted familism and respect for elders as two salient values in the context of dual culture adaptation occurring when Mexican families reside in the US. *Familism*, individuals' endorsement of the belief that family is a source of support and guidance and thus the family needs come before ones' individual needs (Knight et al., 2010), is held with high regard in Mexican families (Hurtado, 1995; Keefe & Padilla, 1987;

Knight et al., 2010). In fact, previous research has noted that Mexican Americans endorse the value of familism at higher rates than European Americans (Sabogal, Marin, Otero-Sabogal, Vanoss, Marin, & Perez-Stable, 1987) and Mexican immigrants endorse this value more than US-born Mexican individuals (Knight et al., 2010). Latino, and in particular Mexican, families are also characterized by strong age-related hierarchies, such that youth are expected to *respect their elders* (Halgunseth, Ispa, & Rudy, 2006; Harrison, Wilson, Pine, Chan, & Buriel, 1990). Once again this value has been found to be more highly endorsed by Latino parents than European American parents (Okagaki & Frensch, 1998). Further, when interviewing Mexican-immigrant parents, Reese (2002) found that parents feared their children may lose the values of respecting ones' elders. Thus, the values of familism and respect for elders have been noted as being salient to Mexican American families residing in the US and for this reason it is important to understand the intergenerational transmission of these values.

**Goal 1: Transmission of Cultural Values in Mexican Families in Adolescence and Emerging Adulthood**

Within Westernized societies, values are believed to be developed and internalized during adolescence (Kohlberg, 1976) and emerging adulthood (Arnett, 2000). During these developmental periods, increased cognitive development and social role changes make the need to develop and internalize values a salient task towards establishing one's identity as an autonomous adult (Harter, 1990; Marcia, 1994). Therefore, cultural development may become more complex and self-driven in adolescence and emerging adulthood (Schönpflug &

Bilz, 2009). However, individuals in adolescence and emerging adulthood are theorized to differ in their parent-youth dynamics and, therefore, parent-youth socialization may differ during these two developmental periods.

**Vertical versus horizontal cultural socialization.** Research on socialization suggests that there are two different types of socialization processes (Berry, 2007; Grusec & Hastings, 2007). Vertical socialization, when adults socialize youth, is theorized to be more hierarchical in nature as adults are perceived to be experts imparting knowledge onto youth. Horizontal socialization, when peers teach peers, is more egalitarian as peers are perceived to have equal power in the relationship and therefore can exchange, question, and create ideas together. In childhood and early adolescence the general balance of authority between parents and youth is quite distinguished. Parents are generally the authority over their children, especially within Latino families who are characterized as upholding strong age-based familial hierarchies, such that older family members have authority over younger family members (Fuligni, 1998).

As youth transition into emerging adulthood, however, the balance of power between parents and their children may shift to a more egalitarian relationship where parents may see their adult children as peers (Glass et al., 1986; Pinquart & Silbereisen, 2004). Consistent with this premise, a nationally representative sample of European American, African American and Hispanic parents and young adult children showed that as youth transition into more adult roles, parents reduce control and increase collaborative interaction styles with their children (Aquilino, 1997). Therefore, the associations between parents' and

emerging adults' cultural values may be more reciprocal than between parents' and adolescents'. The change in parent-youth dynamics highlights the need to explore the transmission of cultural values both for adolescents, who may be highly influenced by parents, and for emerging adults, who may show more egalitarian parent-youth socialization dynamics. Therefore, the first goal of this study was to explore the reciprocal associations between parents' (i.e., mothers' and fathers') and two offsprings' cultural values, including a younger sibling transitioning from early to late adolescence (referred to as adolescents) and an older sibling transitioning from mid/late adolescence to emerging adulthood (referred to as emerging adults). In this study, it was hypothesized that mothers and fathers would show a *vertical* pattern of socialization in cultural values with their younger, adolescent, children; in contrast, mothers and fathers would show a *horizontal* pattern of socialization with their older, emerging adult, children.

**Goal 2: Parent-Youth Immigrant Status as a Moderator of Associations between Parents' and Youth's Cultural Values**

Work on cultural transmission and value socialization suggests that similarities between parents' and children's values come about because they share similar experiences that make certain values salient and necessary, a process called status inheritance (Glass et al., 1986). Researchers arguing for the concept of status inheritance (Glass et al., 1986; Harris, 2002) suggest that when parents and children are raised in similar geographic and cultural environments, the external environment helps to enculturate intergenerational similarity as there is consistency in parents' own childhood experiences and the environment in which

their own offspring are raised. Further, youth who are raised within a different culture, as in the case of immigrant parents and native-born youth, may be more knowledgeable of the new culture; therefore, parents may be faced with the less common occurrence of also being socialized by their offspring in the new cultures' values and norms (Bacallao & Smokowsky, 2007). For the second goal of this study, parent-youth immigrant status was examined as a proxy of contextual similarity (i.e., status inheritance) to understand the moderating role of status inheritance on within-family (parent-youth) associations in cultural values. In particular, this study examined whether intergenerational associations in cultural values differed for families characterized by similarity (e.g., parent and youth were both raised in the US) versus dissimilarity (e.g., parents are immigrants but youth were raised in the US) in immigrant experiences.

When parents immigrate to a new culture, the task of socializing their children to their ethnic cultural values (i.e. Mexican culture) may be more difficult if the new environment does not place importance on certain values (Harris, 2002; Padilla, 2006). Therefore, parents who grew up in one culture may be raising children in another culture, and that lack of status inheritance may minimize parents' ability to transmit their cultural values to their offspring (Vollebergh et al., 2001). In Vedder et al.'s (2009) cross-sectional research on families residing in 10 different countries, native-born parents and youth reported more similarity in values as compared to immigrant parents of native-born youth, supporting the idea that growing up in similar environments is important to consider in the transmission of cultural values. Research on Mexican and Latino

immigrant families suggest that youth often serve as mediators for parents and the US culture when parents lack experience within the US culture or with the English language, often referred to as cultural brokering (Bacallao & Smokowsky, 2007). In such cases, youth may be faced with the unique experience of influencing parents' values and norms. Drawing from research and theory, it was hypothesized that parents and youth who shared social experiences (i.e., immigrant-immigrant or US-raised-US-raised) would show a stronger parental influence over youth's cultural values as compared to families who did not share similar parent-youth social experiences (i.e., immigrant-born parent with US-raised youth) who may, in turn, show a stronger youth influence over parents.

When exploring differences in parent-youth immigrant experiences, previous research focused on the age of immigration argues for the need to use more nuanced indicators of the immigrant experience. Specifically, research suggests that youth who immigrate to the US by or before school age report higher English fluency (Stevens, 1999) and more positive school adjustment (Glick & White, 2003) as their social experiences are most similar to native-born youth who are exposed to the school system at the same age; thus, youth who immigrate before age 6 may look more similar to US-born youth. Research has also suggested migration by age 12 is associated with different psychosocial adjustment and US attachment than migration after age 12, as people who immigrate by age 12 generally enter into the US school system where they may have experienced systemized exposure to the English language and US social norms (Rumbaut, 1997; Oropesa & Landale, 1997). Therefore, important

developmental tasks that occur during adolescence, such as identity (Umaña-Taylor & Fine, 2004) and value (Kohlberg, 1976) development may occur with substantial influence from the native and US culture. Such research suggests that there are critical ages of immigration for youth and adult immigrants that should be accounted for in the study of immigrant families. Thus, when exploring the role of parent-youth immigrant status on cultural transmission, a more nuanced estimate of the immigrant experience will be accounted for within this study such that critical ages of immigration will be accounted for when exploring parents' (immigration before age 12) and youths' (immigration before age 6) immigrant status.

## Current Study

To summarize, my goal is to explore the *bidirectional* associations in cultural values among Mexican American parents and their adolescent and emerging adult children using *longitudinal* data spanning five years. The inclusion of mothers, fathers, and two offspring provides a unique opportunity to explore how parents' influence differs when children are at different stages in their life-course and to explore different patterns of influence in two values salient to this population: familism and respect for elders. More specifically, I aim to test two hypotheses. First, based on developmental and family socialization perspectives suggesting parents' influence differs by their offspring's age (Grusec & Hastings, 2007), I hypothesized that parents would show a more vertical pattern of socialization with their younger, adolescent, children and a more horizontal pattern of socialization with their older, emerging adult, children. Second, based

on research on status inheritance (Glass et al. 1986), I hypothesized that families with similar parent-youth immigrant experiences (i.e., parent and youth are US-born or US-raised; parent and youth who immigrated after a critical age) would show a stronger parent influence over youths' values as compared to families who did not share similar parent-youth immigrant experiences (i.e., parent immigrated after a critical age and youth is US-born or US-raised); these families were expected to show a stronger youth influence over parents' values. Given that there is little research on Mexican American families' intergenerational cultural transmission, no hypotheses were made regarding how patterns of cultural transmission may differ for each cultural value. Thus, my focus on the reciprocal associations between parent-youth cultural values will begin to highlight the nuances in family cultural transmission dynamics within the context of Mexican American families, and immigrant and non-immigrant families. In addition, adolescents' gender was included as a control variable, as research has shown that adolescents' gender is related to family socialization in Mexican-origin families (Azmitia & Brown, 2002).

## Method

### Participants

Participants were mothers, fathers, younger siblings, and older siblings in 246 Mexican American families who were part of a longitudinal project on family socialization and adolescent development (Updegraff, McHale, Whiteman, Thayer, & Delgado, 2005). Given the goals of the study, to examine the role of family, cultural, and gender socialization processes, participating families met the

following criteria: (1) mothers were of Mexican-origin; (2) target adolescents (i.e., 7th graders) were living in the home with an older sibling and were not learning disabled; (3) biological mothers and biological or long-term adoptive fathers (i.e., more than ten years) lived at home; and (4) fathers worked at least 20 hrs/week. Although not required, most fathers (93%) were of Mexican-origin.

Mexican American families with 7th graders were recruited from schools in a southwestern metropolitan area. To recruit families, letters and brochures describing the study in both English and Spanish were sent to families, and bilingual staff conducted follow-up phone calls to assess eligibility and interest in participation. Families' names and contact information were obtained from junior high schools in five school districts and from five parochial schools. Schools were selected to represent a range of socioeconomic situations, with the proportion of students receiving free/reduced lunch varying from 8% to 82%. Of 421 families who were eligible, 284 (67%) agreed to participate, 95 (23%) refused, and we were unable to re-contact the remaining 42 families (10%). Interviews were completed by 246 families. Those who agreed but did not participate in the final sample ($n$ = 38) were families that we were unable to locate or with whom we were unable to complete a home interview after repeated attempts.

At the onset of the study, mothers' average age was 39 years ($SD$ = 4.63) and fathers' average age was 41 years ($SD$ = 5.77). Most parents were born in Mexico (71% of mothers and 69% of fathers) and primarily spoke Spanish (66% of mothers, and 67% of fathers). Parents reported an average of 10 years of education ($M$ = 10.33; $SD$ = 3.73 for mothers, and $M$ = 9.87, $SD$ = 4.37 for

fathers). Parents came from a range of socioeconomic levels, with the percentage of families meeting federal poverty guidelines (18.3%) being similar to two-parent Mexican American families in poverty in the county where the sample was drawn (i.e., 18.6%; US Census, 2000). Median household income was $40,000 (range from $3,000 to over $250,000). Parents reported being married an average of 17.57 years (*SD* = 5.42). Younger siblings were of age 12.51 (*SD* = 0.58) and older siblings were of age 15.48 (*SD* = 1.57). Over 51% of younger siblings and 50% of older siblings were female. Adolescents were most likely to be born in the US (62%) and preferred to complete the interview in English (83%).

At Wave 2, five years after the initial wave of date collection, over 75% of the families participated (*n* = 184). Those who did not participate could not be located (*n* = 43), had moved to Mexico (*n* = 2), could not presently participate or were difficult to contact (*n* = 8), or refused to participate (*n* = 8). When comparing the non-participant families at Wave 2 (*n* = 62) with the participant families (*n* = 184), the non-participant families reported significantly lower income at Wave 1 (*M* = $37,632; *SD* =$28,606 for non-participant families and *M* = $59,517; *SD* = $48,395 for participant families) and lower maternal education (*M* = 9.48; *SD* = 3.45 for non-participant families and *M* = 10.62; *SD* = 3.80 for participant families). At Wave 2, younger siblings were 17.74 (*SD* = .56) and older siblings were 20.68 (*SD* = 1.58) years of age.

**Procedure**

At each phase, families participated in structured in-home interviews lasting two to three hours. Parents and adolescents gave informed consent and reported on parent-youth relationship qualities, cultural backgrounds and values, and adjustment. Interviews were conducted separately with each family member using laptop computers. Bilingual interviewers read the questions aloud due to variability in participants' reading levels. Families received a $100 and $125 honorarium for the participation of all four family members in the home interview at Wave 1 and Wave 2, respectively.

## Measures

All measures were forward and back-translated into Spanish for local Mexican dialect (Foster & Martinez, 1995). All final translations were reviewed by a third native Mexican American translator and discrepancies were resolved by the research team. Focus groups and pilot work were conducted to ensure the cross-ethnic and language equivalence of existing measures. Cronbach's alphas for all measures were acceptable for English- and Spanish-speaking participants; thus, for efficiency all alphas are reported for the overall sample rather than separately by language.

**Socioeconomic status (Wave 1).** Parents reported on their educational levels and their annual incomes. Families' socioeconomic status (SES) was measured by standardizing the log of household income (to correct for skewness), mothers' education level, and fathers' education level. The three variables were then averaged to create SES, with higher scores indicating higher SES. Cronbach's alpha was .78.

**Parent-youth immigrant status.** Mothers reported if they, the younger sibling and older sibling were born in the US (coded as 1) or Mexico (coded as 2), and fathers reported if they were born in the US, Mexico, or another country. Further, immigrant parents reported their length of US residence at Wave 1 and immigrant youth reported on their length of US residence at Wave 2. The length of US residence was subtracted from each family member's corresponding age to calculate each family member's age at immigration to the US. Given previous research (Rumbaut, 1997; Stevens, 1999) age 6 was considered the critical age of immigration for youth as they would have entered the school system at the same time as their US-born peers, and age 12 was considered the critical age for parents as they would have experienced some schooling within the US system (See Appendix A for group comparisons in cultural and socioeconomic correlates by nativity and critical age of migration). The parent-youth immigrant status measure was created such that dyads in which both parents and youth were born in the US or immigrated before their corresponding critical period were given a score of 1 = US-raised; dyads in which each person immigrated to the US after their critical period (i.e., age 6 for youth and age 12 for parents) were given a score of 2 = immigrant; and dyads where youth were born in the US (or immigrated before the critical period) and parents immigrated after their critical period were given a score of 3 = mixed-status. Table 1 provides demographic information and frequencies for all parent-youth immigrant status dyads.

**Cultural values (Wave 1 and 2).** The Mexican American Cultural Values Scale (Knight et al., 2010) was used to measure parents' and youths' familism (16

item) and respect for elders (8 items) in Waves 1 and 2. Family members rated the items on a 5-point scale (1 = strongly disagree to 5 = strongly agree) to indicate how much they agreed with each statement. Items were averaged to create subscale scores at each wave. Two sample items for the familism subscale are "Parents should teach their children that the family always comes first" and "Family provides a sense of security because they will always be there for you." For the respect for elders subscale, two sample items are "No matter what, children should always treat their parents with respect" and "Children should always be polite when speaking to any adult." The Cronbach's alphas of each subscale for mothers, fathers, older and younger children are reported in Table 2.

## Results

To test the goals of exploring the bidirectional associations between parents' and their offspring's cultural values as well as the moderating role of stage of development/sibling position and parent-youth immigrant status in these associations, a series of autoregressive cross-lag panel models (Cole & Maxwell, 2003) were estimated in Mplus 6.11 (Múthen & Múthen, 2011) separately for mother-youth and father-youth dynamics. Cross-lag models allow for the estimation of individual stability in cultural values from Wave 1 to Wave 2, the estimation of the cross-lag associations between parents' cultural values at Wave 1 on youths' cultural values at Wave 2 (five years later), and youths' cultural values at Wave 1 on parents' cultural values at Wave 2. Within each model an estimator of Type = Complex with Cluster = Family ID was used to correct the standard errors within the data to account for the nested nature of including data

from two siblings within each model. In addition, missing data were accounted for using the Full Information Maximum Likelihood (FIML) estimator with family SES at Wave 1 included as an auxiliary variable to account for the fact that participating and non-participating families differed in family SES.

Models specific to each cultural value (i.e., familism, respect for elders) were estimated in a similar four-step fashion. First, an overall model was estimated including the following paths: (1) parents' (mothers' or fathers') and youths' cultural values at Wave 1 to cultural values at Wave 2 (referred to as: stability effects), (2) parents' cultural values at Wave 1 to youths' values at Wave 2 (referred to as: parent influence effects), and (3) youths' cultural values at Wave 1 to parents' cultural values at Wave 2 (referred to as: youth influence effects; Figure 1), (4) stage of development/sibling position (0 = younger sibling and 1 = older sibling) and parent-youth immigrant status (immigrant: 0 = mixed-status and 1 = immigrant; US-raised: 0 = mixed-status and 1 = US-raised) as main effects, and (5) youth gender (0 = girls, 1 = boys) as a control variable. All models included correlations between the exogenous variables (i.e., adolescents' gender, sibling position, parent-youth immigrant status and parents' and youths' cultural values at Wave 1) and within time error correlations for the endogenous variables (i.e., parents' and youths' cultural values at Wave 2). Each model was just identified so all model fit statistics indicated perfect fit ($\chi^2$ (0) = 0.00, CFI = 1.00, RMSEA = 0.00); therefore, the R-squared statistic was used to indicate if each model accounted for a significant amount of variance in parents' and youths' Wave 2 cultural values.

To test the moderating role of stage of development/sibling position and parent-youth immigrant status, a series of multi-group auto-regressive cross-lag models were estimated by assessing differences between adolescent and emerging adult sibling, and then assessing differences by parent-youth immigrant status. The multi-group models included the following paths: (1) stability effects, (2) parent influence effects, (3) youth influence effects, (4) stage of development/sibling position main effects (for the parent-youth immigrant status moderation models) and parent-youth immigrant status main effects (for stage of development/sibling position moderation models), and (5) youths' gender (0 = girls, 1 = boys) as a control variable. All models included correlations between the exogenous variables and within time error correlations for the endogenous variables. Moderation by the respective grouping variable was tested when a youth or parent influence effect was significant in one group but not another or when the strength or direction of a path coefficient differed across groups. Moderation was tested by constraining paths one at a time and using a log-likelihood nested model test to compare model fit between a model where paths were constrained to be equal across groups and a model where paths were free to vary across groups. If the log-likelihood difference test indicated a constrained model resulted in poorer fit (i.e., significant $\chi^2$ of $p < .05$) then moderation was assumed (Kline, 1998). Descriptive statistics for all study variables are displayed separately by stage of development/sibling position (Table 3), and immigrant status (Tables 4 and 5).

**Familism Values**

The overall models testing the bidirectional associations between mother and youth and father and youth familism values appear in Table 6. Each model accounted for a significant amount of variance in parents' and youths' familism values at Wave 2. A significant parent influence effect, but not a significant youth influence effect, emerged for mothers such that mothers' higher endorsement of familism values at Wave 1 was associated with youths' higher endorsement of familism values at Wave 2. In contrast, a significant youth influence effect, but not a significant parent influence effect, emerged for fathers such that youths' lower endorsement of familism values at Wave 1 was associated with fathers' higher endorsement of familism values at Wave 2. When looking at the multiple group models, no significant moderation emerged for stage of development/sibling position or immigrant status for the mother-youth or father-youth models.

**Respect for Elders Values**

The overall models testing the bidirectional associations between mother and youth and father and youth respect for elders values appear in Table 7. Each model accounted for a significant amount of variance in parents' and youths' respect for elders values at Wave 2. A significant parent influence effect emerged in the overall model for mothers such that mothers' higher endorsement of respect for elders values at Wave 1 was associated with youths' higher endorsement of respect for elders values at Wave 2. In addition to the parent-influence effect, a significant immigrant status moderation emerged in the mother-youth model suggesting that a negative youth influence effect was significant for immigrant

dyads, $\beta$= -0.10, $p < .05$, but not for mixed-status dyads, $\beta$= 0.05, *ns,* $\Delta \chi^2 (1) = 4.18$, $p < .05$. Although US-raised dyads, β= 0.04, *ns*, also reported a non-significant youth influence effect the test of moderation comparing US-raised with immigrant dyads only approached significance, $\Delta\chi^2(1) = 3.64$, $p = .06$. No significant stage of development/sibling position moderation emerged in the mother-youth models. When looking at father-youth dynamics, no significant parent influence or youth influence effects emerged. Additionally, no significant stage of development/sibling position or immigrant status moderation emerged for the mother-youth or father-youth models.

**Summary**. The overarching goal of the current study was to explore the bidirectional associations in cultural values among Mexican American parents and their adolescent and emerging adult children. Results focused on mother-youth associations indicated a significant mother influence effect for familism and respect for elders values, and in addition, a significant immigrant status moderation effect emerged revealing that a significant youth influence effect was present in immigrant dyads' respect for elders' values, but not for US-raised or mixed-status dyads. Such results did not differ when comparing adolescents to emerging adults. When exploring father-youth associations, a significant youth influence effect, but not a father influence effect, emerged for familism values and this association did not differ for younger and older siblings or by dyad immigrant status. No significant parent or youth influence effects emerged for father-youth respect for elders values.

## Discussion

This study contributes to research on Mexican-origin youth through the examination of bidirectional associations in cultural values among Mexican American mothers and fathers and their adolescent and emerging adult children within a multicultural environment. Using a longitudinal within-family design, this study documents the important role of mothers in the development of youths' cultural values and potential ways in which youth also impact parents' cultural values. Thus, the present study furthers our current understanding of within-family cultural dynamics and explores similarities and differences between youth at different stages of development and in different family contexts as defined by parents' and youth's immigrant status.

**Mother- and Father-Youth Patterns of Value Socialization**

Overall, a pattern of mother-to-youth vertical socialization was evident, as mothers' reports of strong familism values predicted increases in youths' familism and respect for elder values five years later, after accounting for stability in youth's values. For father-youth relationships, different patterns emerged. Youths' lower familism values were associated with an increase in fathers' familism values five years later, beyond the effects of stability in fathers' values. In contrast, father-youth respect for elder values were not significantly associated. Differences between mother- and father-youth dynamics are consistent with research on gender dynamics in Mexican American families (Coltrane & Adams, 2008). In this cultural context, women are the "carriers of culture" (Padilla, 2009) and mothers are the primary caretakers of children (Coltrane & Adams, 2008). Thus, mothers may have an increased influence over youths' cultural values, and

in particular, youths' family-oriented values – respect for elders and familism. Fathers, on the other hand, are more often involved in youths' leisure activities, as compared to day-to-day caretaking activities, and may be expected to be more involved in the work domain as opposed to the home domain (Coltrane & Adams, 2008). Therefore, fathers may be more influential over a different set of values (e.g., work ethic values) as opposed to the family-oriented values that were the foci of this study. Future research should look at a wider set of values (e.g., education, work ethics, politics) to explore how mother-youth and father-youth socialization patterns differ in different value domains.

**Moderating Role of Stage of Development**

Although it was expected that parents would show a vertical (parent-influence) socialization pattern with offspring transitioning from early to late adolescence and a horizontal (reciprocal) pattern with offspring transitioning mid/late adolescence to emerging adulthood (Grusec & Hastings, 2007), findings were similar across developmental periods. In this sample of sibling pairs who were relatively close in age (i.e. 2-3 years apart, on average), socialization patterns were similar despite differences in their transition periods. It may be that more reciprocal socialization patterns emerge when young adults begin to establish themselves in their own family and work roles.

**Moderating Role of Parent-Youth Immigrant Status**

Informed by research on status inheritance (Glass et al., 1986), the moderating role of parent-youth immigrant status was explored in parent-youth value socialization with the expectation that stronger parent-influence

socialization would occur when parents and youth shared social/immigrant experiences (i.e., immigrant-immigrant or US-raised-US-raised) than when parents and youth did not share social/immigrant experiences (i.e., immigrant-born parents and US raised youth). We found evidence that parent-youth immigrant status moderated patterns of youth influence on mothers' respect for elder values. Specifically, when immigrant youth reported a lower endorsement of respect for elders values, immigrant mothers reported a higher endorsement of the same values five years later and this pattern was not present for mixed-status or US raised dyads. In addition to the mother-influence effect present for all three nativity groups, the additional youth-influence effect suggests that a reciprocal parent-youth socialization strategy may be present for the mother-youth immigrant dyads, but not the mixed-status or US raised dyads. It is possible that mothers in immigrant dyads, who have recently immigrated to the US (an average of 4 years prior to the onset of this study), may be more sensitive to youths' lower endorsement of their cultural values, although their values continue to matter for youth. Therefore, mothers may increase their endorsement of their respect for elders values in hopes of increasing their cultural socialization efforts. This horizontal (reciprocal) socialization pattern was not present for the more established and potentially more acculturated immigrant dyads (mixed-status) who may have experienced the flux of accommodating and integrating the Mexican and American culture when they first migrated to the US (an average of 14 years prior to the study's onset); and it was not present for the US-raised dyads where parent and youth were primarily raised within the same cultural context and

potentially raised to endorse similar values (Glass et al., 1986). In addition, this pattern was not present for mother-youth familism values, potentially because age-based hierarchical family dynamics are strongly linked to day-to-day parent-child interactions and thus the disconnect between mother and youths' respect for elders values, as opposed to familism values, may be more salient to mothers on a daily basis. A second potential reason may be because mothers' familism values changed at a smaller rate from W1 to W2 and the standard errors were much smaller as compared to the estimates of mothers' respect for elders values; therefore, there may not have been as much statistical power to detect a significant youth influence effect or less variability that could have been accounted for by youths' values at W1.

**Strengths and Limitations**

Among the strengths of the current study, differentiations were made between mother-youth and father-youth dynamics within the same family, allowing for the exploration of different mother-youth and father-youth dynamics without confounding such differences with family membership. In addition, the longitudinal design provided a means to model each individual's stability in values and account for changes in values across time as a consequence of the parents' and youths' influence over one another. Finally, by using a nuanced indicator of immigrant status (i.e., differentiating between immigrant parents who migrated after age 12, and immigrant youth who migrated after age 6), it was possible to differentiate between recent and more established parent-youth immigrant groups and thus provide a more specific account of how recent and

established immigrant dyads may differ in their parent-youth socialization dynamics.

The present study also has limitations. First, the study design used a comparative approach for youth transitioning from early to late adolescence as compared to youth transitioning from mid/late adolescence to emerging adulthood and this may be a reason why no significant stage of development moderation was evident. Future research should explore *changes* in socialization strategies, as opposed to *comparing* socialization strategies, by increasing the time span of the study to follow parent-youth socialization patterns across three or more time points and thus model changes over time within the same dyads. A second limitation of the study is related to the inclusion of only two cultural values strongly related to Mexican culture and representative of family-oriented values. An important next step will be to include values more strongly endorsed by American culture to explore how youth may "bring home" American culture to their parents, a process argued by the cultural-brokering literature (Bacallao & Smokowsky, 2007). Also by only focusing on family-oriented cultural values it was not possible to see how parents and youth influence one another in values related to other domains (e.g., work, school), and as a consequence father' role in value socialization may have been underestimated. Future research should aim to include values from several social and cultural domains to better understand mothers' and fathers' unique and complimentary roles in value socialization.

## Conclusion

The current study illustrated the nuances of cultural development within and between families. In particular, the study highlighted the importance of mothers in youths' cultural development and highlighted situations where youth play an active role in their parents' cultural development. As cultural similarities among family members are associated with more harmonious parent-youth relationships (Padilla, 2006) and positive youth adjustment (Denniss et al., 2010), the current study provides important information regarding the bidirectional associations between mother-youth and father-youth cultural value development. By providing a picture of how parents' and youths' cultural values are associated with one another over time, it is possible to understand the nuances in parent-youth dynamics within the context of bicultural adaptation and integration.

## PAPER 2 - Imitating and De-Identifying from Parents and Parent-Youth Cultural Incongruence

For immigrants and children of immigrants residing in the United States, the task of integrating the mainstream and ethnic culture is a salient and important part of adjusting to life in the US (Padilla, 2009; Portes & Rumbaut, 2001). Mexican American families are one such group where the integration of the American and Mexican culture are salient tasks that impact psychosocial adjustment (Gonzales, Knight, Morgan-Lopez, Saenz, & Sirolli, 2002) and family relationship dynamics (e.g., Rueschenberg & Buriel, 1995). In particular, researchers focused on bicultural integration have noted that parent-youth cultural incongruence (i.e., acculturation gap or dissonance) is a salient factor for immigrant and minority families as more cultural incongruence has been associated with lower family cohesion and higher levels of adolescents' internalizing and externalizing behaviors (Telzer, 2010).

The socialization processes associated with cultural transmission provide a framework for understanding how parent-youth cultural incongruence occurs. First, theoretical and empirical work suggests that parents and societal structures (e.g., schools) are the primary socializing agents of the cultural norms and values (Harris, 2002). Within these social contexts, youth are taught the norms, language, and traditions of the Mexican and American culture. However, less research has focused on the role of adolescents as *active participants* in their socializing experiences (see Phinney, 1990 and Umaña-Taylor & Fine, 2004, for exceptions focused on ethnic identity). Consequently, it is imperative to understand how

youth choose to accept and recreate (i.e., imitate) or depart from (i.e., de-identify) the cultural norms to which they have been exposed.

Social learning theory (Mischel, 1966) provides a framework for understanding why youth may chose to imitate or de-identify from their parents. Youth may choose to accept or reject a cultural message based on the valence of the parent-youth relationship (i.e., warmth) and degree of similarity between themselves and their parents (e.g., in immigrant status or gender; Mischel, 1966; Whiteman, McHale, Crouter, 2007). In addition, early theoretical work on individuation (Blos, 1979) and autonomy (Erikson, 1968; Steinberg & Silverberg, 1986) proposed that youth increasingly de-identify from parents as they transition from adolescence to emerging adulthood. Therefore, cultural transmission is not a simple process of presenting information to a developing individual, but a complex process that must account for aspects of the parent-youth relationship context that may lead to more or less similarity in parents' and adolescents' cultural orientations.

The purpose of this study is to extend previous theoretical and empirical research on parent-youth cultural incongruence by exploring the process of Mexican-origin adolescents' imitation and de-identification from parents. Social learning theory (Mischel, 1966) informs my first goal of linking parent-youth relationship qualities and parent-youth similarities in immigration status and gender to Mexican American youth's imitation and de-identification from their parents. Second, youth's imitation and de-identification from parents will be linked to parent-youth cultural incongruence in Mexican and Anglo cultural

orientations to highlight youths' active role in their cultural development. A multilevel longitudinal design will be used to capitalize on information from two siblings within each family and to understand how imitation or de-identification from parents may differ for youth transitioning from early to later adolescence (younger siblings) and from mid/late adolescence to emerging adulthood (older sibling).

**Parent-Youth Cultural Incongruence: Adolescents' Imitation and De-Identification**

Ethnic minority individuals often face the challenge of maintaining their ethnic culture while also integrating the mainstream culture. The process of integrating and adapting to both cultures is important because it may influence family members' ability to adjust to their social environment and it has implications for family dynamics (Padilla, 2009). For example, when family members integrate, adapt, or shed the mainstream and ethnic culture at different rates, then family members operate under different cultural values, norms, and expectations (Birman, 2006).

Researchers focused on parent-youth cultural incongruence have primarily focused on the incongruence that occurs when youth integrate the mainstream culture at faster rates than their parents (Szapocznik & Kurtines, 1980; 1993); however, cultural incongruence can occur in relation to the ethnic culture as well (Birman, 2006). Parents are expected to maintain the ethnic culture at higher rates than youth and youth are expected to integrate the mainstream culture at higher rates than parents. Sometimes, however, parents integrate in the mainstream

culture more rapidly than youth or youth maintain the ethnic culture at higher rates than their parents. Each of these patterns of cultural incongruence has been associated with family members' psychosocial maladjustment or disruptions in family dynamics (Telzer, 2010), highlighting the need to understand how, exactly, cultural incongruence occurs amongst family members.

Researchers suggest that immigrant parents and native-born youth have different socialization experiences as parents are raised within their native culture prior to immigrating and youth are raised within the mainstream culture; therefore, youths' exposure to the ethnic culture occurs primarily through their parents' socialization attempts (Glass, Bengston, & Dunham, 1986; Vedder, Berry, Sabatier, & Sam, 2009). However, youth may choose to accept or reject the cultural socialization messages they receive, a research topic that has not been given much consideration in the study of bicultural integration (Knafo & Schwartz, 2009). In ethnic identity research, a process closely associated to cultural integration, adolescents' active participation in exploring their culture to develop and decide on their ethnic identity, has been acknowledged and empirically tested (Phinney, 1990; Umaña-Taylor & Fine, 2004). Research on ethnic identity, thus, provides evidence of youth's active role in their cultural development.

One way in which youth can impact their cultural development is through the decision to imitate or de-identify from their parents. Youth may look to parents as good or bad examples of how youth should interact with their social environment (Grusec & Davidov, 2007), especially in reference to adult social

conventions (e.g., work ethic, educational values, family formation; Smetana, 1997). By deciding that parents are good or bad role models, then youth may choose to replicate (imitate) or depart from (de-identify) parents' behaviors and values (Kuczynski & Hildebrandt, 1997). Research on parent-adolescent dynamics has shown that parent imitation is associated with parent-adolescent similarities in gender orientations (Cunningham, 2001), nutrition and exercise (Bylund, Baxter, Imes, & Wolf, 2010), and deviant behaviors (Andrew, Hops, & Duncan, 1997). However, research on bicultural integration has yet to study the association between adolescents' imitation and de-identification from parents and parent-youth cultural incongruence (See Knafo, Assor, Shalom, Schwartz, & David, 2009 for an exception).

This study aims to extend previous research by exploring the association between youths' report of imitating or de-identifying from parents in relation to adult social roles (i.e., career, education and romantic relationships) and parent-youth cultural incongruence. It is expected that youth who report more imitation of parents' behaviors will also show less parent-youth cultural incongruence in their Anglo and Mexican cultural orientations. Youth who, on the other hand, report more de-identification from parents will report more parent-youth cultural incongruence in their Anglo and Mexican orientations.

**Correlates of Imitation and De-Identification of Parents**

In addition to understanding how imitation and de-identification are associated with parent-youth cultural incongruence, it is important to understand what predicts youth's imitation or de-identification from parents. Social learning

theory suggests that youth learn by watching an actor's (e.g., parent's) behavior and deciding to imitate the actor based upon youths' sense of connection to the actor (Mischel, 1966); similarly, relational perspectives on socialization (Hinde, 1979; Kuczynski & Hildebrandt, 1997) suggest that youth who are more invested in the parent-youth relationship are more willing to internalize parents' values. Both perspectives suggest youth may feel a stronger connection or investment in the parent-youth relationship when there is (1) a positive parent-youth relationship, and (2) a strong perception of similarity between a parent and youth. Theoretical work on individuation (Blos, 1979; Rice, 1992) and autonomy development (Erikson, 1968; Steinberg & Silverberg, 1986), two processes closely associated to de-identification, have also noted that youth increasingly seek to differentiate themselves from parents during the transition from adolescence to emerging adulthood in an effort to develop an adult identity independent from their parents. Therefore, it is also important to acknowledge youths' stage of development when looking at the processes of imitation and de-identification.

**Parent-youth relationship quality.** First, having a positive parent-youth relationship, characterized by high degrees of parent-youth warmth/acceptance, helps foster youths' willingness to comply with parents' socialization goals (Laible & Thompson, 2007; Bao, Whitbeck, Hoyt, & Conger, 1999). In empirical research focused on cultural incongruence, Russian immigrant youth who reported high degrees of parent-youth warmth reported more parental identification and stronger orientations towards their ethnic culture (Knafo et al.,

2009). Such research suggests that youth who report more parent-youth warmth will report more imitation, and possibly, less de-identification from parents.

**Parent-youth demographic similarities.** Second, youth are expected to feel more connected to their parents if they perceive a strong degree of similarity and two demographic characteristics may be particularly salient to the process of parent-youth imitation/de-identification and cultural incongruence among Mexican American youth: parent-youth gender composition and immigrant status. Research on youth's gender orientations suggests that youth tend to identify with same-sex models (Slaby & Frey, 1975; Blakemore, Berenbaum, & Liben, 2008) and the salience of same-sex modeling is heightened during the transition through adolescence (Hill & Lynch, 1983). When looking to research on cultural incongruence, Knafo et al. (2009) found that parent-youth cultural incongruence occurred less often with same-sex dyads as compared to opposite-sex dyads. Such research suggests that boys will be more likely to imitate fathers' behaviors and de-identify from mothers', and girls will be more likely to imitate mothers' behaviors and de-identify from fathers'.

Similarities in immigrant status also may be important for Mexican American families, as different immigrant statuses may serve as proxies for different socialization experiences and different access to resources. Researchers (Glass et al., 1986; Harris, 2002) suggest that when parents and children are raised in similar socio-cultural environments, as is the case when both parents and youth are immigrant-born or both are native-born, the socio-cultural environment helps to enculturate intergenerational similarity. In one study on cultural incongruence,

parents and youth reported more value similarities if both parents and youth were native-born, but less value similarities if parents were immigrants and youth were native-born (Vedder et al., 2009). Research has not looked at the associations between immigrant status and youth's imitation or de-identification from parents; however, research on cultural-brokering suggests that when parents are immigrants, and have limited knowledge of the mainstream culture or language, then youth serve as mediators for the mainstream culture by teaching parents about the mainstream values and serving as translators between the parent and various social institutions (Bacallao & Smokowsky, 2007). It is possible that youth whose parents are immigrants may be less likely to imitate parents and more likely to de-identify from parents to better adjust to the mainstream environment. In fact, research on parent-youth cultural incongruence has suggested that youth's faster adaptation to Anglo culture is beneficial to their cultural adjustment as well as their families' overall adjustment (Telzer, 2010). Research on role-modeling and immigrant status is limited; therefore, this section of the present study is exploratory but previous work on cultural incongruence (Vedder et al., 2009) and cultural-brokering (Bacallao & Smokowsky, 2007) suggests that youth who do not share the same immigrant experience as their parents (i.e., immigrant parents with US-raised or US-born youth) may be less likely to imitate and more likely to de-identify from parents than youth who share the same immigrant experience (parent and youth were born or raised within the US system, parent and youth are immigrants).

In addition to exploring the association between parent-youth immigrant status and parental imitation/de-identification, a more nuanced exploration of the parent-youth immigrant experience must be used as parents' and youth's nativity does not fully account for the level of experiences within the US. Previous research focused on the age of immigration suggest that youth who immigrate to the US by or before school age (e.g., 6 to 7 years old) report higher English fluency (Stevens, 1999) and more positive school adjustment (Glick and White, 2003) as their social experiences are most similar to native-born youth who are exposed to the school system at the same age. Research also has suggested migration by age 12 is associated with a different immigrant experience such that people who immigrate by age 12 generally enter into the US school system where they may have systemized exposure to the English language and US social norms (Rumbaut, 1997; Oropesa & Landale, 1997) and are able to experience adolescence and important developmental tasks (i.e., identity and value development) within the US. Such research suggests that there are critical ages of immigration for youth (i.e., immigration by age 6) and adult (i.e., immigration by age 12) immigrants that should be accounted for in the study of immigrant families.

**Stage of development.** Research on socialization (Smetana, 1997), adolescent individuation (Blos, 1979) and autonomy development (Steinberg & Silverberg, 1986) suggest that parents' influence over youth becomes more differentiated as youth transition from childhood to adolescence and even more so when youth transition from adolescence to emerging adulthood (Arnett, 2007).

Specifically, youth may seek to differentiate themselves from parents in order to develop an independent identity. Further, research on gender development (Hill & Lynch, 1983) suggests that parents' gender may be most salient for youth in early as compared to late adolescence, as early adolescent youth will be experiencing biological changes that may make them more likely to look to their same-sex parent when attempting to learn about adult gender norms. Such research suggests that different patterns of parental imitation/de-identification may emerge for youth in early and mid/late adolescence; for example, early adolescents may imitate their same-sex parent more than mid/late adolescents and mid/late adolescents may be more like to de-identify and less likely to imitate parents than early adolescents. For this reason, the present study will explore the differences between older (mid/late adolescent) and younger (early adolescent) siblings when studying the processes of parent-youth cultural incongruence and parental imitation and de-identification.

## Current Study

The current study aimed to extend previous research by exploring the processes through which parent-youth cultural incongruence may emerge within Mexican American families. First, socialization research highlights the potential associations among youths' imitation and de-identification from parents and parent-youth cultural incongruence (Kuczynski & Hildebrandt, 1997). Further, social learning theory (Mischel, 1966) provides a reference point to understand what predicts youths' imitation or de-identification from parents. Given previous research, the present study aimed to address two research goals. The first goal was

to explore the associations among parent-youth warmth and demographic similarities on youths' reports of imitation or de-identification from parents. It was expected that youth who reported more parent-youth warmth at Wave 1, belong to a same-sex parent-youth dyad, and shared a similar parent-youth immigrant status would report more imitation and less de-identification from parents at Wave 2, five years later. The second goal was to link youths' imitation or de-identification from parent to parent-youth cultural incongruence in Anglo and Mexican cultural orientations. It was expected that youth who reported more imitation or less de-identification at Wave 2 would report less cultural incongruence at Wave 3, two years later. Finally, the current study differentiated between younger (early adolescent) and older (mid/late adolescent) siblings to explore how stage of development played a role in the process of parental imitation/de-identification and cultural incongruence. By utilizing a within-family design, it was possible to explore the precursors to parental imitation/de-identification and cultural congruence for two siblings transitioning across different developmental periods (i.e., 13 to 20 and 15 to 23).

## Method

### Participants

Participants were mothers, fathers, younger siblings and older siblings in 246 Mexican American families who were part of a longitudinal project on family socialization and adolescent development (Updegraff, McHale, Whiteman, Thayer, & Delgado, 2005). Given the goals of the study, to examine the role of family, cultural, and gender socialization processes, participating families met the

following criteria: (1) mothers were of Mexican-origin; (2) target adolescents were living in the home with an older sibling and were not learning disabled; (3) biological mothers and biological or long-term adoptive fathers (i.e., more than ten years) lived at home; and (4) fathers worked at least 20 hrs/week. Although not required, most fathers (93%) were of Mexican-origin.

Mexican American families with seventh graders were recruited from schools in a southwestern metropolitan area. To recruit families, letters and brochures describing the study in both English and Spanish were sent to families, and bilingual staff conducted follow-up phone calls to assess eligibility and interest in participation. Families' names and contact information were obtained from junior high schools in five school districts and from five parochial schools. Schools were selected to represent a range of socioeconomic situations, with the proportion of students receiving free/reduced lunch varying from 8% to 82%. Of 421 families who were eligible, 284 (67%) agreed to participate, 95 (23%) refused, and we were unable to re-contact the remaining 42 families (10%). Interviews were completed by 246 families. Those who agreed but did not participate in the final sample ($n$ = 38) were families that we were unable to locate or with whom we were unable to complete a home interview after repeated attempts.

At the onset of the study, mothers' average age was 39 years ($SD$ = 4.63) and fathers' average age was 41 years ($SD$ = 5.77). Most parents were born in Mexico (71% of mothers and 69% of fathers) and primarily spoke Spanish (66% of mothers, and 67% of fathers). Parents reported an average of 10 years of

education (*M* = 10.33; *SD* = 3.73 for mothers, and *M* = 9.87, *SD* = 4.37 for fathers). Parents came from a range of socioeconomic levels, with the percentage of families meeting federal poverty guidelines (18.3%) being similar to two-parent Mexican American families in poverty in the county where the sample was drawn (i.e., 18.6%; US Census, 2000). Median household income was $40,000 (range from $3,000 to over $250,000). Parents reported being married an average of 17.57 years (*SD* = 5.42). Younger siblings were of age 12.51 (*SD* = 0.58) and older siblings were of age 15.48 (*SD* = 1.57). Over 51% of younger siblings (*n* = 125) and 50% of older siblings (*n* = 123) were female. Adolescents were most likely to be born in the US (62%) and preferred to complete the interview in English (83%).

At Wave 2, five years after the initial wave of date collection, over 75% of the families participated (*n* = 184). Those who did not participate could not be located (*n* = 43), had moved to Mexico (*n* = 2), could not presently participate or were difficult to contact (*n* = 8), or refused to participate (*n* = 8). When comparing the non-participant families at Wave 2 (*n* = 62) with the participant families (*n* = 184), the non-participant families reported significantly lower income at Wave 1 (*M* = $37,632; *SD* =$28,606 for non-participant families and *M* = $59,517; *SD* = $48,395 for participant families) and lower maternal education (*M* = 9.48; *SD* = 3.45 for non-participant families and *M* = 10.62; *SD* = 3.80 for participant families). At Wave 2, younger siblings were 17.74 (*SD* = .56) and older siblings were 20.68 (*SD* = 1.58) years of age.

At Wave 3, seven years after the initial wave of date collection and two years after Wave 2, over 70% of the families participated ($n$ = 173). Those who did not participate could not be located ($n$ = 45), had moved to Mexico ($n$ = 4), could not presently participate or were difficult to contact ($n$ = 4), or refused to participate ($n$ = 8). The 12 remaining non-participant families were classified as mixed-status as family member within these family did not participate for different reasons (e.g. in one family the father refused to participate and we were unable to locate the mother, younger sibling, and older sibling). When comparing non-participating families at Wave 3 ($n$ = 73) with participant families ($n$ = 173), non-participant families reported significantly lower income at Wave 1 ($M$ = \$41,635; $SD$ =\$39,095 for non-participant families and $M$ = \$59,136; $SD$ = \$46,674 for participant families), lower maternal education ($M$ = 9.35; $SD$ = 3.53 for non-participant families and $M$ = 10.75; $SD$ = 3.75 for participant families), and lower paternal education ($M$ = 8.49; $SD$ = 4.08 for non-participant families and $M$ = 10.46; $SD$ = 4.37 for participant families). At Wave 3, younger siblings were 19.59 ($SD$ = .61) and older siblings were 22.56 ($SD$ = 1.57) years of age.

**Procedure**

At each phase, families participated in structured in-home interviews lasting two to three hours. Parents and adolescents gave informed consent and reported on parent-youth relationship qualities, cultural backgrounds and values, and adjustment. Interviews were conducted separately with each family member using laptop computers. Bilingual interviewers read the questions aloud due to variability in participants' reading levels. Families received a \$100 and \$125

honorarium for the participation of all four family members in the home interview at Wave 1 and Wave 2, respectively. At Wave 3, each family member received a $75 honorarium for participation.

**Measures**

All measures were forward and back-translated into Spanish for local Mexican dialect (Foster & Martinez, 1995). All final translations were reviewed by a third native Mexican American translator and discrepancies were resolved by the research team. Focus groups and pilot work were conducted to ensure the cross-ethnic and language equivalence of existing measures. Cronbach's alphas for all measures were acceptable for English- and Spanish-speaking participants; thus for efficiency, all alphas are reported for the overall sample rather than separately by language.

**Socioeconomic status (Wave 1).** Parents reported on their educational levels and their annual incomes. Families' socioeconomic status (SES) was measured by standardizing the log of household income (to correct for skewness), mothers' education level, and fathers' education level. The three variables were then averaged to create SES, with higher scores indicating higher SES. Cronbach's alpha was .78.

**Parent-youth warmth (Wave 1).** Adolescents used the short form of the Children's Report of Parental Behavior Inventory (Schwarz, Barton-Henry, & Pruzinsky, 1985) to describe their perceptions of warmth with their mothers and fathers. Each of eight items was rated on a 5-point scale (1 = almost never to 5 = almost always), such that higher scores represented greater warmth. This scale has

been shown to be reliable and valid with Latinos in English and Spanish (Knight, Virdin, & Roosa, 1994). Cronbach's alphas indicated good reliability for older siblings' reports of warmth from mothers, *a* = .89, and fathers, *a* = .93, and younger siblings' reports of warmth from mothers, *a* = .84, and fathers, *a* = .89.

**Demographic similarities between the dyad (Wave 1).** Two dyad characteristics were used to measure demographic similarity: parent-youth gender composition and parent-youth immigrant status. For the *parent-youth gender composition*, gender was inherent in the mother (female) and father (male) designation, and adolescent gender was given a score of 0 = females or 1 = males. By including youths' gender, it is possible to account for the parent-youth gender composition within the mother and father models (e.g., girls in the father model will make up a opposite-sex gender composition group, and boys in the father model will make up the same-sex gender composition group).

For *parent-youth immigrant status*, mothers reported if they, the younger sibling and older sibling were born in the US (coded as 1) or Mexico (coded as 2), and fathers reported if they were born in the US, Mexico, or another country. Further, immigrant parents reported their length of US residence at Wave 1 and immigrant youth reported on their length of US residence at Wave 2. The length of US residence was subtracted from each family member's corresponding age to calculate each family member's age at immigration to the US. Given previous research (Rumbaut, 1997; Stevens, 1999) age 6 was considered the critical age of immigration for youth as they would have entered the school system at the same time as their US-born peers, and age 12 was considered the critical age for parents

as they would have experienced some schooling within the US system (See Appendix A for group comparisons in cultural and socioeconomic correlates by nativity and critical age of migration). The parent-youth immigrant status measure was created such that dyads who reported both were born in the US or immigrated before their corresponding critical period were given a score of 1 = US-raised; dyads who reported they both immigrated to the US after their critical period (i.e., age 6 for youth and age 12 for parents) were given a score of 2 = immigrant; and dyads where youth reported being born in the US (or immigrated before the critical period) and parents reported immigrating after their critical period were given a score of 3 = mixed-status. Table 1 provides demographic information and frequencies for all parent-youth immigrant status dyads.

**Imitation and de-identification from parents (Wave 2)**. An adapted version of Whiteman, McHale, and Crouter's (2007) measure of sibling imitation and de-identification was used to examine the degree to which (1 = *never* to 5 =*very often*) youth *imitate* or *de-identify* from their mothers and fathers at Wave 2. The imitation measure was comprised of six items where youth reported imitating parents' behaviors in three domains (romantic relationships, work, and education). Two examples are: "My mother/father sets an example for how I should behave in romantic relationships" and "My mother/father is a role model for how I should act with respect to work." The de-identification measure was comprised of 11 items where youth reported de-identifying after parents in the same three domains (romantic relationships, work, and education). Two examples are: "I have learned from watching my mother/father's romantic relationships what I should not do."

and “I try to have educational experiences that are different from my mother/father.”).

A factor model using Mplus 6.1 (Mùthen & Mùthen, 2011) was used to estimate the best fitting factor structure for each dyad. A first-order factor model indicated the existence of up to three subscales (i.e., Romantic relationship, work, and education) for reports of imitation and de-identification. However, subscales within the imitation measure were highly correlated amongst each other and subscales within the de-identification measure were highly correlated amongst each other. When a second-order factor structure (Chen, Suosa & West, 2005) was imposed upon the imitation and de-identification measures separately, all models showed adequate to good fit (CFI > .95, RMSEA < .08, SRMR <.08) and an improvement in model fit from the first-order factor model (Chi-square difference test were significant at the $p < .05$ level). The improvement in fit indicates that, although three subscales exist within the imitation and de-identification measures, an overarching measure of imitation accounts for the correlations amongst the imitation subscales and an overarching measure of de-identification accounts for the correlations amongst the de-identification subscales. For this study, two overall measures of imitation and de-identification were created where items were averaged together and a higher score indicated more imitation or more de-identification from parents. The imitation and de-identification scales showed good reliability with Cronbach’s alphas above .80 for all dyads (Table 8).

Further youth's reports of imitation and de-identifying were correlated with youth's responses to the following two items: "How much do you go to your mom/dad for advice or support?" "How much do you want to be like your mom/dad?" All correlations worked in the expected direction (i.e., positive for correlations with imitating, and negative for correlations with de-identifying; Table 8) indicating the scales showed good criterion validity.

**Parent-youth cultural incongruence (Wave 3).** All four family members completed the Acculturation Rating Scale for Mexican Americans – II (ARSMA–II; Cuellar, Arnold, & Maldonado, 1995) to measure their *Mexican* (17 items: ) and *Anglo cultural orientations* (13 items). All items were rated on a 5-point scale (1 = *not at all* to 5 = *extremely often or always*). Higher scores indicated stronger Mexican and Anglo orientations. Cronbach's alphas were above .74 for mothers (Anglo $a$ = .93; Mexican $a$ = .88), fathers (Anglo $a$ = .91; Mexican $a$ = .91), older siblings (Anglo $a$ = .86; Mexican $a$ = .90), and younger siblings (Anglo $a$ = .74; Mexican $a$ = .90).

To create an estimate of Mexican cultural congruence at each wave of measurement, a difference score was estimated, such that youth's reports of Mexican cultural orientations were subtracted from parents' reports of Mexican cultural orientations. A similar method was used to create an estimate of Anglo cultural congruence; however, the difference score was now estimated so parents' Anglo orientation was subtracted from youths' Anglo orientation.

## Results

To examine predictors of youth's imitation and de-identification from parents and associations to later parent-youth cultural incongruence, a path analysis technique was used in Mplus 6.1 (Múthen & Múthen, 2011) with an estimator of Type = complex and cluster = Family ID. This statistical technique allowed for the inclusion of younger and older siblings' data in the same model to empirically test sibling differences while adjusting the standard errors in order to account for the nested nature of the data.

For all research goals, a multiple imputation technique was used to account for missing data in the Wave 2 and Wave 3 variables, such that 20 datasets were imputed using all study variables and including SES at Wave 1. The imputation algorithm was allowed to cycle for 20, 000 iterations and new datasets were saved at every $1000^{th}$ step (Enders, 2011). All descriptive information (Table 9) and parameter estimates reflect the aggregate results for all 20 imputed datasets.

### Goal 1: Predicting Imitation and De-Identification from Parents

The first research goal was to link parent-youth relationship qualities and demographic similarities to youth's reports of imitation or de-identification from parents. First, two overall models were estimated separately for mother-youth and father-youth relationship dynamics. Predictor variables included adolescents' reports of parent-youth warmth at Wave 1 as indicators of the quality of the parent-youth relationship; and dummy coded variables for adolescents' gender (0=girls, 1= boys) and parent-youth immigrant status (immigrant, 1=immigrant

and 0 = mixed-status; US-raised, 1 = US-raised and 0 = mixed-status) as indicators of parent-youth demographic similarities. In addition, an indicator of youth's sibling position (0 = younger and 1 = older sibling) was included as a covariate to account for youth's stage of development/sibling position. Dependent variables were adolescents' reports of imitating and de-identifying from their parents at Wave 2 (Table 10). All predictor variables were allowed to correlate with one another and error terms for the dependent variables were allowed to correlate. Because each model was just identified, all model fit statistics indicated perfect fit ($\chi^2$ (0) = 0.00, CFI = 1.00, RMSEA = 0.00) ; therefore, an R-squared statistic was used as an indicator that the analytic model accounted for a significant amount of variance in youths' reports of imitating and de-identifying from mothers and fathers.

Next, to test for stage of development/sibling differences, multiple-group path models were estimated separately for mother-youth and father-youth dynamics where sibling position was used as the grouping variable. All other paths were identical to the overall model. Stage of development/sibling position was tested for moderation when a path coefficient was significant for one group but not the other or when significant path coefficients differed in strength or direction. Moderation was tested by constraining paths one at a time and using a log-likelihood nested model test to compare model fit between a model where paths were constrained to be equal across groups versus a model where paths were free to vary across groups. If the log-likelihood difference test indicated a

constrained model resulted in poorer fit (i.e., significant $\chi^2$ of $p < .05$) then moderation was assumed (Kline, 1998).

When testing the predictors of *imitation* of parents, significant associations emerged for adolescents' reports of parent-youth warmth, adolescents' gender, and parent-youth immigrant status but not for stage of development/sibling position (Table 10). For mother-youth relationship dynamics, adolescents' reports of parent-youth warmth positively predicted imitation of mothers' behaviors. Also, estimates indicated boys and youth who belonged to immigrant dyads reported less imitation of mothers than girls and youth from mixed-status dyads, respectively. No differences were associated with belonging to a US-raised versus mixed-status dyad. For father-youth relationship dynamics, once again parent-youth warmth positively predicted youths' imitation of fathers' behaviors. Youth from US-raised dyads reported more imitation than youth from mixed-status dyads and no differences were significant between immigrant versus mixed-status dyads or boys versus girls. Multi-group analyses did not indicate any significant stage of development/sibling position moderation.

For predictors of *de-identification* from parents, significant associations emerged for adolescents' reports of parent-youth warmth and parent-youth immigrant status, but not for adolescents' gender or stage of development/sibling position (Table 10). For mother-youth relationship dynamics, adolescents' reports of parent-youth warmth negatively predicted de-identifying from mothers and youth who belonged to US-raised dyads reported less de-identifying than youth from mixed-status dyads. No differences were associated with belonging to an

immigrant dyad versus a mixed-status dyad. For father-youth relationship dynamics, parent-youth warmth also negatively predicted de-identifying from fathers and youth from US-raised dyads reported less de-identifying than youth from mixed-status dyads. Once again, no differences were associated with belonging to an immigrant dyad versus a mixed-status dyad and no differences emerged for adolescent gender or stage of development/sibling position. Multi-group analyses did not indicate any significant stage of development/sibling position moderation.

**Goal 2: Predicting Parent-Youth Cultural Incongruence**

The second research goal was to link youths' reports of imitation and de-identification from parents at Wave 2 to estimates of parent-youth Anglo and Mexican cultural incongruence at Wave 3. First, two overall models were estimated separately for mother-youth and father-youth relationship dynamics. Predictor variables included youths' reports of imitation and de-identifying from parents at Wave 2. Stage of development/sibling position (0 = younger sibling and 1 = older sibling) was included as a covariate to account for youths' stage of development/sibling position. Dependent variables were estimates of parent-youth Anglo and Mexican cultural incongruence at Wave 3 (Table 11). All predictor variables were allowed to correlate with one another and error terms for the dependent variables were allowed to correlate. Because each model was just identified, all model fit statistics indicated perfect fit ($\chi^2$ (0) = 0.00, CFI = 1.00, RMSEA = 0.00); therefore, the R-squared statistic was used to indicate if each model accounted for a significant amount of variance in the dependent variable.

Next, multiple-group path models were once again estimated separately for mother-youth and father-youth dynamics to test for moderation in stage of development/sibling position. Sibling position was used as the grouping variables and all other paths were identical to the overall model. Moderation was tested by constraining paths one at a time and using a log-likelihood nested model test in order to compare model fit between a model where paths were constrained to be equal across groups and a model where paths were free to vary across groups. If the log-likelihood difference test indicated a constrained model resulted in poorer fit (i.e., significant $\chi^2$ of $p < .05$) then moderation was assumed (Kline, 1998).

When looking at predictors of *Anglo cultural incongruence* (see Table 11), the R-squared statistics indicated the analytic model predicted a significant amount of variance in the father-youth model and approached significance for the mother-youth model. The model estimates indicated youths' report of de-identifying from parents, but not for imitating parents, significantly predicted parent-youth Anglo cultural incongruence. For mother-youth and father-youth models, de-identifying from parents was associated with a larger estimate of parent-youth Anglo cultural incongruence. When looking to predictors of *Mexican cultural incongruence*, the R-squared statistics indicated the analytic model was not a significant predictor of variance in the mother-youth or father-youth models. Additionally, no significant associations emerged for youths' report of imitating or de-identifying from parents for either mother-youth or father-youth models. Multi-group analyses did not indicate any significant stage of development/sibling position moderation.

**Summary.** The goals of this study were to examine predictors of youth's imitation and de-identification from parents and the associations to later parent-youth cultural incongruence. Results focused on predictors of youths' imitation and de-identification suggest that dyads who were characterized by higher parent-youth warmth and belonging to a US-raised dyad reported more imitation and less de-identification from mothers and fathers. Parent-youth gender similarity was also a significant predictor of imitating mothers, and not fathers, such that girls reported imitating mothers more than boys. Next, results focused on the predictors of parent-youth cultural incongruence suggest that more de-identification, and not imitation, was associated with a larger estimate of parent-youth Anglo cultural incongruence. No significant associations emerged for parent-youth Mexican cultural incongruence.

## Discussion

This study explored the processes through which parent-youth cultural incongruence emerges amongst Mexican American families and extended prior research in three ways. First, youths' *active* role in their cultural development was underscored, as youths' reports of de-identifying from parents were linked to incongruence in parent-youth Anglo orientations. Second, the exploration of how family characteristics are linked to cultural incongruence provided evidence that parent-youth warmth and demographic similarities were associated with more imitation and less de-identification from parents. Third, mother- and father-youth dynamics with two offspring were explored over time and showed how

associations with youths' imitation/de-identification from parents and parent-youth cultural incongruence were consistent across several parent-youth dyads.

**Correlates of Imitation and De-Identification of Parents**

Socialization literature (Kuczynski & Hildebrandt, 1997) and social learning theory (Mischel, 1966) guided the first goal, to explore the associations among parent-youth warmth, demographic similarities (i.e., parent-youth gender and immigrant status), and youths' reports of imitation or de-identification from parents. In addition, research on adolescent development (Erikson, 1968; Steinberg & Silverberg, 1986) suggested that differences in parent-youth dynamics may emerge for early and mid/late adolescent siblings.

In the current study, youths' perceptions of parent-youth warmth were associated with higher reports of imitation and lower reports of de-identification from both mothers and fathers. The current findings are congruent with previous research linking warmth and imitation (Knafo et al., 2009; Laible & Thompson, 2007), but findings also extend research by documenting that more warmth was associated with less de-identification. Importantly, the current study suggests youth who feel closer to and more accepted by their parents are less likely to actively differentiate themselves from their parents.

Some evidence also emerged suggesting demographic similarities predicted imitation and de-identification from parents. When considering parent-youth gender composition, imitation of mothers was higher for girls than for boys, but imitation of fathers did not differ for girls versus boys. Boys, who have been shown to uphold more traditional gendered attitudes as compared to girls (Adams,

Coltrane & Parke, 2007), may feel less compelled to imitate mothers as they seek to behave in accordance with their prescribed gender roles. Girls, on the other hand, may not feel such a strong need to behave in gender-typed ways, leading to similarities in boys' and girls' reports of imitating their fathers. Alternatively, as Mexican American families have been characterized by gender-based hierarchies with fathers and males having more power than mothers and females (Coltrane & Adams, 2008), imitating fathers may be a means to seeking power within the family structure and thus be beneficial to both daughters and sons. Future research should explore the reasons why youth choose to imitate mothers and fathers to disentangle differences in boys' and girls' imitation of mothers compared to fathers.

Differences in imitation and de-identification were also predicted by the combination of parents' and youths' immigrant status. Specifically, the pattern of results showed that youth from US-raised dyads were more likely to imitate fathers and less likely to de-identify from parents than youth from mixed-status dyads, and youth from mixed-status dyads were more likely to imitate mothers than youth from immigrant dyads. Consistent with literature on status inheritance (Glass et al., 1986), in US-raised dyads it is more likely that parents' past social experiences and successes may be more similar to what youth are currently experiencing as both were raised within the US culture and school system. Thus, youth from US-raised dyads may see parents as more viable models for successful behavior as compared to youth from mixed-status dyads whose parents were raised in a different cultural environment so their past social experiences may

seem irrelevant or even contradictory to US norms. Differences between immigrant and mixed-status dyads, on the other hand, may have emerged because of mothers' immigrant experience. Mothers in the immigrant dyads are more recent immigrants, as they have resided in the US for less than four years, and may still be developing their own proficiency in the US culture; thus, recently immigrated mothers may not be feasible role models for youth. In contrast, mothers in the mixed-status dyads, although immigrants, have resided in the US for almost 15 years and may have already developed a proficiency in the US culture so youth might have felt more confident imitating their more established immigrant mothers. The current findings underscore the importance of accounting for parent-youth immigrant statuses and, in particular, the insights gained from examining more nuanced indicators of immigrant experiences that differentiate between recent and more established immigrants.

Finally, theory and research on autonomy development (Erikson, 1968; Steinberg & Silverberg, 1986) and individuation (Blos, 1979) suggest that differences in youths' imitation and de-identification from parents may emerge in early versus middle/late adolescence. However, no differences were identified within this study in comparisons of younger and older siblings. Possibly, differences did not emerge because siblings were relatively close in age (i.e., 2 to 3 years difference, on average) and parent-youth dynamics were more similar than different. Future research should aim to measure imitation and de-identification across a broader swath of development in order to measure changes in imitation/de-identification within-parent-youth dyads.

**Parent-youth Cultural Incongruence and Youths' Imitation and De-Identification From Parents**

The second goal was to link youths' imitation or de-identification from parents to parent-youth cultural incongruence in Anglo and Mexican cultural orientations. Results showed that youths' de-identification, and not imitation, from parents was associated with higher levels of parent-youth incongruence in Anglo orientations. These findings, in combination with prior research (Bacallao & Smokowsky, 2007), suggest that youth may need to seek out other models, and potentially de-identify from parents in order to become more competent in the Anglo culture. For Mexican cultural incongruence, a significant correlation and a trend within the path models suggested more imitation of mothers may be linked to less Mexican cultural incongruence. Potentially, the lack of significance within the path model may be due to the fact that there was less variability in Mexican as compared to Anglo cultural incongruence, making it more difficult to detect significant associations.

**Strengths and Limitations**

The current study capitalized on a within-family design to explore similarities and differences in mother-youth and father-youth relationship processes in adolescence and emerging adulthood. In addition, a longitudinal design allowed for the exploration of associations between parent-youth warmth and demographic similarities with imitation/de-identification from parents five years later, and the association between imitation/de-identification from parents with parent-youth cultural incongruence, two years later. Also, differentiating

among immigrant, mixed-status, and US raised dyads allowed for a more precise exploration of the parent-youth immigrant experience. This approach made it possible to differentiate between recent and more established immigrant parent-youth dyads (immigrant versus mixed-status dyads), instead of only nativity differences (i.e., US born versus immigrant), when exploring youths' reports of imitating and de-identifying form parents.

Despite this study's strengths, some limitations must be acknowledged. First, the current study only included youths' imitation/de-identification and parent-youth cultural incongruence at one point in time. Thus, the bidirectional associations between youths' imitation/de-identification and parent-youth cultural incongruence were not explored. Future studies should measure youths' imitation/de-identification and parent-youth cultural incongruence at multiple time-points to illuminate the sequential and reciprocal processes through which Mexican and Anglo cultural incongruence emerge. Second, the current study focused on overarching indicators of incongruence in Anglo and Mexican cultural involvement. Given that the indicators of imitation and de-identification were focused on specific social roles (i.e., work, education, and romantic relationship) it may be helpful to explore how imitation and de-identification from parents is associated with parent-youth incongruence in cultural values associated with education, work ethics, and social relationships in future studies.

## Conclusion

The current study took a first step in understanding the processes associated with parent-youth cultural incongruence. Moving beyond past

literature (Telzer, 2010) youths' active role in parent-youth cultural incongruence was highlighted through youths' decision to imitate or de-identify from parents. Further, the current study showcased the importance of parent-youth relationships and demographic similarities in such family processes and the similarities in mother-youth and father-youth dynamics. As parent-youth cultural incongruence has been associated with family adjustment (Telzer, 2010), having a more precise understanding of how cultural incongruence emerges in Mexican American families can move research forward and inform prevention and intervention research.

# OVERALL CONCLUSION

For Mexican American families, the process of adapting and integrating the Mexican and American culture has important implications for family dynamics (Birman 2006) and psychosocial adjustment (Gonzalez et al., 2002). In particular, the level of cultural similarity or dissimilarity between parents and youth may lead to more or less family cohesion (Birman, 2006) and this may become a source of resilience or risk for Mexican American families (Telzer, 2010). Thus, the current dissertation was aimed to explore two processes associated with families' cultural development. Collectively, both studies highlighted processes through which parents and youth became more culturally similar and dissimilar; showcased youths' active role in their families' cultural development; and highlighted how the parent-youth immigrant experience was associated with parent-youth cultural incongruence. Separately, each study identified different mother- and father-youth patterns of cultural transmission, indicating that different aspects of culture (i.e., cultural values versus cultural orientation and behaviors) may operate under different parent-youth dynamics.

## Collective Contributions

The two research studies were complimentary in highlighting processes through which cultural incongruence emerged. Study 1 showed how youths' *lower* endorsement of familism and respect for elders values were associated with *increased* endorsement of immigrant mothers' familism values and fathers' respect for elders values. In Study 2, results showed how more de-identification from parents was associated with higher levels of parent-youth Anglo cultural

incongruence. Taken together, each study highlights two ways in which cultural incongruence can emerge: (1) through parents' increased endorsement of Mexican cultural values as a reaction to youths' own values and (2) through youth de-identification from parents and increased Anglo orientations.

Next, each study highlighted youths' active role in their cultural development. In Study 1, youths' lower endorsement of familism and respect for elders' values was linked to parents' increased endorsement in the same values. In Study 2, youths' own decision to imitate or de-identify from parents was linked to more Anglo cultural incongruence. Thus Study 1 highlighted youths' influence over their parents' value endorsement and Study 2 highlighted youths' own agency in their socialization experiences and then linked this agency to parent-youth cultural incongruence.

In addition, each study highlighted the importance of accounting for parent-youth immigrant status as a context within which these socialization processes occur. Study 1 showcased how mother-youth immigrant dyads demonstrated a different pattern of cultural transmission as compared to mixed-status and US raised dyads. Study 2 revealed how youth from US raised dyads were more likely to imitate and less likely to de-identify from parents, and how youth from immigrant dyads were less likely to imitate mothers, both in comparison to mixed-status dyads. Each study provides distinct examples as to how parents' and youths' immigrant experiences translate into different parent-youth relationship dynamics.

## Unique Contributions

Each study also provided unique contributions to our knowledge of parents' and youths' cultural development by identifying distinct mother-youth and father-youth patterns of cultural transmission. In the first study, mothers' important role in influencing youths' cultural *values* was evident, but fathers' influence on familism and respect for elder values did not emerge. In Study 2, mother-youth and father-youth dyads showed very similar patterns in terms of the correlates of youths' imitation and de-identification from parents, but showed a stronger connection between de-identifying from fathers (as compared to mothers) and parent-youth cultural incongruence. Thus Study 1, showcased mothers' role in the development of cultural values, and Study 2 showcased similar parent-youth dynamics for mothers and fathers, but highlighted a stronger connection between father-youth dynamics and parent-youth cultural orientations.

## Future Directions

The present dissertation has highlighted important processes associated with the cultural development of Mexican American families; however, several next steps are necessary. First, future research should focus on modeling trajectories of change in cultural incongruence and link changes in incongruence to parent-youth relationship dynamics, such as youth' imitation and de-identification, and parent-youth warmth. By looking at trajectories of change it may be possible to identify changes in cultural incongruence associated with youths' developmental transitions, instead of comparing youth from different developmental stages. Next, future research should integrate indicators of cultural

proficiency and stress to compliment the findings related to parent-youth immigrant status. By including information on parents' cultural proficiency, it will be possible to gain a better understanding of the parent-youth immigrant experience (e.g., Are youth de-identifying from immigrant parents because parents are exhibiting high levels of acculturative stress?). Finally, indicators of psychosocial adjustment should be linked to the processes of cultural transmission to understand, for example, how mothers are emotionally reacting to youths' lower endorsement of their cultural values or how youth are emotionally reacting to their decisions to de-identify from parents. By understanding parents' and youths' psychological experiences as these processes of cultural development unfold, it will be possible to understand the conditions under which processes of cultural adaption and integration may be sources of protection versus risk for Mexican American families.

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# APPENDIX A

# CULTURAL AND SOCIOECONOMIC MEAN DIFFERENCES BY NATIVITY AND CRITICAL AGE OF MIGRATION FOR MOTHERS, FATHERS, YOUNGER SIBLINGS AND OLDER SIBLINGS

| | Mother | | | |
|---|---|---|---|---|
| | Nativity | | Critical Age of Migration | |
| | US-born | Immigrant | Immigrant by 12 | Immigrant after 12 |
| Cultural Background and Values | *M* | *M* | *M* | *M* |
| Familism W1 | $4.34_{ab}$ | $4.47_{a}$ | 4.29 | $4.49_{b}$ |
| Familism W2 | 4.37 | 4.41 | $4.07_{a}$ | $4.44_{a}$ |
| Respect for Elders W1 | 4.31 | 4.36 | 4.24 | 4.37 |
| Respect for Elders W2 | $4.43_{a}$ | 4.39 | $4.00_{ab}$ | $4.42_{b}$ |
| Anglo Orientation W3 | $4.00_{ab}$ | $2.46_{a}$ | $3.91_{c}$ | $2.31_{bc}$ |
| Mexican Orientation W3 | $3.28_{ab}$ | $4.30_{a}$ | $3.50_{c}$ | $4.39_{bc}$ |
| Years living in US W1 | $40.10_{ab}$ | $12.37_{a}$ | $33.14_{b}$ | $10.56_{b}$ |
| % who Attended US Schools | $100.00_{ab}$ | $11.60_{a}$ | $92.9_{b}$ | $4.40_{b}$ |
| Socioeconomic Background | | | | |
| Education Level W1 | $12.78_{ab}$ | $9.32_{a}$ | $12.04_{c}$ | $9.09_{bc}$ |
| Household Income W1 | $79,580.81_{ab}$ | $43,473.28_{a}$ | $69,898.64_{c}$ | $41,131.80_{bc}$ |

*Note.* Mean differences were estimated for US-born versus immigrant, US-born versus immigrant by/after 12 and immigrant by 12 versus after 12. Differences were not estimated for immigrant versus immigrant by/after 12 groups as such group were made up by the same sample. Estimates within a row that share a subscript differed at the $p < .05$ level.

| | Father | | | |
|---|---|---|---|---|
| | Nativity | | Critical Age of Migration | |
| | US-born | Immigrant | Immigrant by 12 | Immigrant after 12 |
| Cultural Background and Values | *M* | *M* | *M* | *M* |
| Familism W1 | $4.25_{ab}$ | $4.54_{a}$ | 4.53 | $4.54_{b}$ |
| Familism W2 | $4.34_{ab}$ | $4.52_{a}$ | 4.46 | $4.53_{ab}$ |
| Respect for Elders W1 | 4.32 | 4.42 | 4.41 | 4.42 |
| Respect for Elders W2 | 4.38 | 4.42 | 4.25 | 4.43 |
| Anglo Orientation W3 | $3.96_{ab}$ | $2.72_{a}$ | $3.79_{c}$ | $2.63_{bc}$ |
| Mexican Orientation W3 | $3.00_{abc}$ | $4.23_{a}$ | $3.75_{b}$ | $4.27_{c}$ |
| Years living in US W1 | $42.46_{ab}$ | $15.18_{a}$ | $32.63_{b}$ | $14.34_{b}$ |
| % who Attended US Schools | $100.00_{ab}$ | $6.90_{a}$ | $75.00_{b}$ | $3.60_{b}$ |
| Socioeconomic Background | | | | |
| Education Level W1 | $12.69_{ab}$ | $8.73_{a}$ | $12.75_{c}$ | $8.54_{bc}$ |
| Household Income W1 | $77,221.95_{ab}$ | $44,447.00_{a}$ | $90,025.00_{c}$ | $42,223.68_{bc}$ |

*Note.* Mean differences were estimated for US-born versus immigrant, US-born versus immigrant by/after 12 and immigrant by 12 versus after 12. Differences were not estimated for immigrant versus immigrant by/after 12 groups as such group were made up by the same sample. Estimates within a row that share a subscript differed at the $p < .05$ level.

| | Younger Sibling | | | |
|---|---|---|---|---|
| | Nativity | | Critical Age of Migration | |
| | US-born | Immigrant | Immigrant by 6 | Immigrant after 6 |
| Cultural Background and Values | *M* | *M* | *M* | *M* |
| Familism W1 | 4.26 | 4.26 | 4.27 | 4.26 |
| Familism W2 | 4.19 | 4.04 | 4.01 | 4.09 |
| Respect for Elders W1 | 4.22 | 4.19 | 4.21 | 4.16 |
| Respect for Elders W2 | 4.08 | 3.94 | 3.86 | 4.05 |
| Anglo Orientation W3 | $4.12_{abc}$ | $3.82_{a}$ | $3.88_{b}$ | $3.70_{c}$ |
| Mexican Orientation W3 | $3.24_{abc}$ | $3.81_{a}$ | $3.82_{b}$ | $3.81_{c}$ |
| M - Years Living in US W1 | $28.01_{ab}$ | $8.11_{a}$ | $12.19_{b}$ | $3.94_{b}$ |
| F - Years Living in US W1 | $30.04_{ab}$ | $11.72_{a}$ | $15.62_{b}$ | $7.74_{b}$ |
| Socioeconomic Background | | | | |
| Household Income W1 | $66,461.97_{abc}$ | $33,607.45_{a}$ | $39,521.85_{b}$ | $27,430.18_{c}$ |
| M - Education Level W1 | $11.12_{ab}$ | $9.04_{a}$ | $10.03_{b}$ | $8.03_{b}$ |
| F - Education Level W1 | $10.72_{abc}$ | $8.50_{a}$ | $9.00_{b}$ | $7.99_{c}$ |

*Note.* M = Mother and F = Father. W1 = Wave 1, W2 = Wave 2, W3 = Wave 3. Mean differences were estimated for US-born versus immigrant, US-born versus immigrant by/after 6 and immigrant by 6 versus after 6. Differences were not estimated for immigrant versus immigrant by/after 6 groups as such group were made up by the same sample. Estimates within a row that share a subscript differed at the $p < .05$ level.

| | Older Sibling | | | |
|---|---|---|---|---|
| | Nativity | | Critical Age of Migration | |
| | US-born | Immigrant | Immigrant by 6 | Immigrant after 6 |
| Cultural Background and Values | *M* | *M* | *M* | *M* |
| Familism W1 | 4.24 | 4.21 | 4.20 | 4.23 |
| Familism W2 | 4.12 | 4.14 | 4.22 | 4.05 |
| Respect for Elders W1 | 4.07 | 4.15 | 4.20 | 4.12 |
| Respect for Elders W2 | 3.99 | 4.13 | 4.26 | 3.98 |
| Anglo Orientation W3 | $4.15_{ab}$ | $3.65_{a}$ | $3.86_{b}$ | $3.39_{b}$ |
| Mexican Orientation W3 | $3.10_{abc}$ | $3.88_{a}$ | $3.73_{b}$ | $4.06_{c}$ |
| M - Years Living in US W1 | $30.52_{ab}$ | $8.87_{a}$ | $13.74_{b}$ | $5.07_{b}$ |
| F - Years Living in US W1 | $32.83_{ab}$ | $11.89_{a}$ | $15.58_{b}$ | $9.00_{b}$ |
| Socioeconomic Background | | | | |
| Household Income W1 | $70,999.35_{abc}$ | $34,493.16_{a}$ | $39,589.14_{b}$ | $30,448.73_{c}$ |
| M - Education Level W1 | $11.57_{abc}$ | $8.90_{a}$ | $9.35_{b}$ | $8.55_{c}$ |
| F - Education Level W1 | $11.08_{abc}$ | $8.50_{a}$ | $8.82_{b}$ | $8.24_{c}$ |

*Note.* M = Mother and F = Father. W1 = Wave 1, W2 = Wave 2, W3 = Wave 3. Mean differences were estimated for US-born versus immigrant, US-born versus immigrant by/after 6 and immigrant by 6 versus after 6. Differences were not estimated for immigrant versus immigrant by/after 6 groups as such group were made up by the same sample. Estimates within a row that share a subscript differed at the $p < .05$ level.

Table 1.
*Sample Breakdown for Older and Younger Siblings' Parent-Youth Immigrant Status*

| | US-raised | Immigrant | Mixed-status |
|---|---|---|---|
| **Mother-Youth** | *n* | *n* | *n* |
| Older Sibling | 85 | 63 | 97 |
| Younger Sibling | 85 | 45 | 115 |
| Total | 170 | 108 | 212 |
| **Demographic Information – W1** | *M (SD)* | *M (SD)* | *M (SD)* |
| Household Income | $78,267 (43,636) | $28,715 (13,504) | $47,399 (47,764) |
| Years living in US | 33.14 (7.37) | 4.01 (2.96) | 13.89 (4.69) |
| Education Level | 12.65 (2.61) | 8.25 (3.73) | 9.51 (3.55) |
| **Father-Youth** | *n* | *n* | *n* |
| Older Sibling | 78 | 63 | 103 |
| Younger Sibling | 78 | 45 | 121 |
| Total | 156 | 108 | 224 |
| **Demographic Information – W1** | *M (SD)* | *M (SD)* | *M (SD)* |
| Household Income | $79,098 (42,798) | $29,113 (13,941) | $48,484 (48,225) |
| Years living in US | 32.63 (6.28) | 7.87 (7.26) | 17.46 (6.22) |
| Education Level | 12.82 (2.72) | 8.23 (4.62) | 8.69 (4.15) |

*Note.* Four fathers were born in a country other than the US or Mexico. Within the younger sibling-father dyads, these fathers made up one immigrant dyad and three mixed-status dyads. Within the older sibling-father dyads, all four fathers belonged to the mixed-status dyads. Two mother-youth dyads and four father-youth dyads were excluded from all immigrant status analysis as the youth reported being immigrants but parents' reported being US-born. All dyad groups differed in their demographic information at the $p < .05$ level. W1 = Wave 1

Table 2.
*Estimates of Reliability for Subscales of Familism and Respect for Elders Values by Wave of Data Collection and Family Member*

| | | Familism | Respect for elders |
|---|---|---|---|
| Mother | Wave1 | 0.80 | 0.68 |
| | Wave 2 | 0.77 | 0.70 |
| Father | Wave1 | 0.85 | 0.69 |
| | Wave 2 | 0.83 | 0.73 |
| Younger Sibling | Wave1 | 0.86 | 0.79 |
| | Wave 2 | 0.86 | 0.81 |
| Older Sibling | Wave1 | 0.90 | 0.84 |
| | Wave 2 | 0.88 | 0.84 |

Table 3.

*Correlations, Means, and Standard Deviations for Younger (Below the Diagonal) and Older (Above the Diagonal) Siblings*

| | Mother-Youth | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **1.** | **2.** | **3.** | **4.** | **5.** | **6.** | **7.** | **8.** | **9.** |
| 1. Youth Familism –W1 | - | .36 | .06 | -.05 | .82 | .29 | .02 | -.01 | -.02 |
| 2. Youth Familism –W2 | .21 | - | .07 | -.04 | .43 | .81 | .08 | .04 | -.05 |
| 3. Parent Familism –W1 | .04 | .26 | - | .46 | .07 | .08 | .63 | .34 | -.02 |
| 4. Parent Familism –W2 | .15 | .20 | .47 | - | -.05 | -.04 | .30 | .60 | -.04 |
| 5. Youth Respect –W1 | .79 | .06 | .06 | .22 | - | .47 | .07 | .01 | .04 |
| 6. Youth Respect –W2 | .21 | .73 | .18 | .17 | .15 | - | .15 | .08 | .02 |
| 7. Parent Respect –W1 | .02 | .18 | .63 | .29 | .07 | .21 | - | .43 | .00 |
| 8. Parent Respect –W2 | .11 | .03 | .34 | .59 | .12 | .07 | .44 | - | .10 |
| 9. Adolescents' Gender | .02 | -.09 | .01 | .12 | -.01 | -.14 | .00 | .23 | - |
| Younger Sibling | | | | | | | | | |
| Mean | 4.26 | 4.13 | 4.43 | 4.40 | 4.21 | 4.01 | 4.34 | 4.41 | 0.49 |
| (SD) | (0.52) | (0.48) | (0.39) | (0.37) | (0.58) | (0.54) | (0.48) | (0.45) | (0.50) |
| Older Sibling | | | | | | | | | |
| Mean | 4.23 | 4.13 | 4.43 | 4.40 | 4.11 | 4.06 | 4.34 | 4.40 | 0.50 |
| (SD) | (0.60) | (0.51) | (0.39) | (0.37) | (0.70) | (0.60) | (0.48) | (0.45) | (0.50) |
| | Father-Youth | | | | | | | | |
| | **1.** | **2.** | **3.** | **4.** | **5.** | **6.** | **7.** | **8.** | **9.** |
| 1. Youth Familism –W1 | - | .35 | -.02 | -.13 | .82 | .29 | -.08 | .06 | -.02 |
| 2. Youth Familism –W2 | .21 | - | -.05 | .05 | .42 | .81 | .00 | .17 | -.05 |
| 3. Parent Familism –W1 | .06 | .20 | - | .75 | .05 | .01 | .65 | .44 | .05 |
| 4. Parent Familism –W2 | -.07 | .16 | .75 | - | -.03 | .04 | .49 | .66 | -.01 |
| 5. Youth Respect –W1 | .79 | .07 | .03 | -.05 | - | .47 | .01 | .12 | .04 |
| 6. Youth Respect –W2 | .20 | .73 | .10 | .01 | .16 | - | .04 | .24 | .02 |
| 7. Parent Respect –W1 | .01 | .07 | .65 | .50 | .02 | .08 | - | .42 | -.02 |
| 8. Parent Respect –W2 | .01 | .17 | .45 | .67 | -.02 | .03 | .42 | - | -.05 |
| 9. Adolescents' Gender | .02 | -.10 | .13 | .08 | -.01 | -.14 | .12 | .05 | - |
| Younger Sibling | | | | | | | | | |
| Mean | 4.26 | 4.13 | 4.46 | 4.45 | 4.21 | 4.01 | 4.39 | 4.40 | 0.49 |
| (SD) | (0.52) | (0.48) | (0.42) | (0.41) | (0.58) | (0.54) | (0.47) | (0.44) | (0.50) |
| Older Sibling | | | | | | | | | |
| Mean | 4.23 | 4.13 | 4.46 | 4.44 | 4.11 | 4.06 | 4.39 | 4.40 | 0.50 |
| (SD) | (0.60) | (0.51) | (0.42) | (0.40) | (0.70) | (0.60) | (0.47) | (0.44) | (0.50) |

*Note.* Based on the FIML sample size of $n = 246$, correlations with an absolute value > .13 are significant at $p < .05$.

Table 4.

*Mother-Youth Correlations, Means, and Standard Deviations for US-raised (N = 170), Immigrant (N = 108) and Mixed-status (N = 212) Dyads, and the Overall Sample (N = 492)*

US-raised (Above the Diagonal) and Immigrant (Below the Diagonal) Dyads

| | **1.** | **2.** | **3.** | **4.** | **5.** | **6.** | **7.** | **8.** | **9.** |
|---|---|---|---|---|---|---|---|---|---|
| 1. Youth Familism –W1 | - | .24 | .00 | -.05 | .88 | .29 | -.01 | .02 | .02 |
| 2. Youth Familism –W2 | .11 | - | .13 | -.10 | .33 | .86 | .02 | -.07 | .02 |
| 3. Mother Familism –W1 | .15 | .22 | - | .62 | -.03 | .04 | .68 | .61 | .07 |
| 4. Mother Familism –W2 | .02 | .24 | .65 | - | -.09 | -.23 | .38 | .60 | .04 |
| 5. Youth Respect –W1 | .76 | .03 | .08 | .09 | - | .34 | -.04 | -.10 | .02 |
| 6. Youth Respect –W2 | .16 | .74 | .13 | .19 | .26 | - | .01 | -.17 | -.03 |
| 7. Mother Respect –W1 | .00 | .23 | .51 | .45 | .10 | .28 | - | .42 | .07 |
| 8. Mother Respect –W2 | .03 | .16 | .43 | .54 | .10 | .21 | .66 | - | .27 |
| 9. Adolescents' Gender | -.02 | -.13 | -.12 | .00 | .06 | -.17 | .02 | .12 | - |
| US-raised Dyads | | | | | | | | | |
| Mean | 4.27 | 4.19 | 4.33 | 4.34 | 4.13 | 4.10 | 4.30 | 4.43 | 0.48 |
| (SD) | (0.50) | (0.44) | (0.35) | (0.40) | (0.66) | (0.57) | (0.43) | (0.51) | (0.50) |
| Immigrant Dyads | | | | | | | | | |
| Mean | 4.23 | 4.09 | 4.49 | 4.43 | 4.13 | 4.07 | 4.39 | 4.42 | 0.48 |
| (SD) | (0.68) | (0.58) | (0.39) | (0.36) | (0.72) | (0.59) | (0.50) | (0.35) | (0.50) |

Mixed-status Dyads(Above the Diagonal) and Overall Sample (Below the Diagonal)

| | **1.** | **2.** | **3.** | **4.** | **5.** | **6.** | **7.** | **8.** | **9.** |
|---|---|---|---|---|---|---|---|---|---|
| 1. Youth Familism –W1 | - | .35 | .03 | .10 | .79 | .25 | .05 | .08 | .01 |
| 2. Youth Familism –W2 | .29 | - | .18 | .03 | .31 | .77 | .15 | -.02 | -.04 |
| 3. Mother Familism –W1 | .05 | .16 | - | .22 | .09 | .21 | .68 | .16 | .02 |
| 4. Mother Familism –W2 | .04 | .10 | .47 | - | .12 | .09 | .11 | .67 | .08 |
| 5. Youth Respect –W1 | .80 | .24 | .07 | .08 | - | .31 | .11 | .09 | -.03 |
| 6. Youth Respect –W2 | .24 | .76 | .13 | .08 | .31 | - | .22 | .06 | .01 |
| 7. Mother Respect –W1 | .02 | .13 | .63 | .30 | .07 | .18 | - | .22 | -.05 |
| 8. Mother Respect –W2 | .04 | .05 | .34 | .59 | .06 | .09 | .44 | - | .21 |
| 9. Adolescents' Gender | .00 | -.07 | -.01 | .04 | .02 | -.06 | .00 | .16 | - |
| Mixed-status Dyads | | | | | | | | | |
| Mean | 4.23 | 4.13 | 4.49 | 4.45 | 4.19 | 4.01 | 4.35 | 4.41 | 0.52 |
| (SD) | (0.54) | (0.48) | (0.41) | (0.34) | (0.59) | (0.55) | (0.50) | (0.42) | (0.50) |
| Overall Sample | | | | | | | | | |
| Mean | 4.25 | 4.13 | 4.43 | 4.40 | 4.16 | 4.03 | 4.34 | 4.41 | 0.50 |
| (SD) | (0.56) | (0.49) | (0.39) | (0.37) | (0.65) | (0.57) | (0.48) | (0.45) | (0.50) |

*Note.* Based on the FIML sample sizes, correlations with an absolute value > .15 (US-raised), > .19 (immigrant), > .14 (mixed-status), > .09 (overall sample) are significant at $p < .05$.

Table 5.

*Father-Youth Correlations, Means, and Standard Deviations for US-raised (N = 156), Immigrant (N = 108) and Mixed-status (N = 224) Dyads, and the Overall Sample (N = 492)*

US-raised (Above the Diagonal) and Immigrant (Below the Diagonal) Dyads

| | **1.** | **2.** | **3.** | **4.** | **5.** | **6.** | **7.** | **8.** | **9.** |
|---|---|---|---|---|---|---|---|---|---|
| 1. Youth Familism –W1 | - | .24 | .00 | -.04 | .88 | .30 | -.03 | .13 | .02 |
| 2. Youth Familism –W2 | .16 | - | .17 | .30 | .32 | .85 | -.03 | .37 | .01 |
| 3. Father Familism –W1 | .12 | .10 | - | .73 | .01 | .08 | .74 | .64 | .14 |
| 4. Father Familism –W2 | -.08 | .15 | .76 | - | -.02 | .15 | .50 | .81 | .16 |
| 5. Youth Respect –W1 | .76 | .08 | .11 | -.09 | - | .34 | -.03 | .13 | .02 |
| 6. Youth Respect –W2 | .19 | .75 | .06 | -.01 | .29 | - | -.09 | .21 | -.05 |
| 7. Father Respect –W1 | .14 | .20 | .60 | .42 | .18 | .20 | - | .32 | .15 |
| 8. Father Respect –W2 | .03 | .26 | .27 | .56 | .02 | .18 | .39 | - | .11 |
| 9. Adolescents' Gender | -.02 | -.15 | .07 | .05 | .06 | -.19 | .07 | -.06 | - |
| US-raised Dyads | | | | | | | | | |
| Mean | 4.27 | 4.19 | 4.27 | 4.28 | 4.13 | 4.10 | 4.32 | 4.32 | 0.48 |
| (SD) | (0.50) | (0.44) | (0.46) | (0.41) | (0.66) | (0.57) | (0.43) | (0.42) | (0.50) |
| Immigrant Dyads | | | | | | | | | |
| Mean | 4.23 | 4.09 | 4.61 | 4.58 | 4.13 | 4.07 | 4.50 | 4.43 | 0.48 |
| (SD) | (0.68) | (0.58) | (0.33) | (0.37) | (0.72) | (0.59) | (0.44) | (0.49) | (0.50) |

Mixed-status Dyads(Above the Diagonal) and Overall Sample (Below the Diagonal)

| | **1.** | **2.** | **3.** | **4.** | **5.** | **6.** | **7.** | **8.** | **9.** |
|---|---|---|---|---|---|---|---|---|---|
| 1. Youth Familism –W1 | - | .34 | -.04 | -.13 | .79 | .24 | -.15 | .01 | .01 |
| 2. Youth Familism –W2 | .28 | - | .08 | .06 | .31 | .77 | -.03 | .04 | -.02 |
| 3. Father Familism –W1 | .02 | .08 | - | .68 | -.01 | .07 | .68 | .46 | .07 |
| 4. Father Familism –W2 | -.10 | .10 | .75 | - | -.04 | -.02 | .51 | .65 | -.06 |
| 5. Youth Respect –W1 | .80 | .24 | .04 | -.04 | - | .32 | -.09 | .00 | -.03 |
| 6. Youth Respect –W2 | .25 | .76 | .06 | .02 | .31 | - | -.01 | .00 | .02 |
| 7. Father Respect –W1 | -.04 | .04 | .65 | .49 | .01 | .06 | - | .42 | -.01 |
| 8. Father Respect –W2 | .04 | .17 | .45 | .67 | .05 | .13 | .41 | - | .02 |
| 9. Adolescents' Gender | .00 | -.07 | .09 | .04 | .02 | -.06 | .05 | .00 | - |
| Mixed-status Dyads | | | | | | | | | |
| Mean | 4.23 | 4.13 | 4.53 | 4.51 | 4.19 | 4.01 | 4.39 | 4.44 | 0.52 |
| (SD) | (0.54) | (0.48) | (0.37) | (0.37) | (0.59) | (0.55) | (0.50) | (0.41) | (0.50) |
| Overall Sample | | | | | | | | | |
| Mean | 4.25 | 4.13 | 4.46 | 4.44 | 4.16 | 4.03 | 4.39 | 4.39 | 0.50 |
| (SD) | (0.56) | (0.49) | (0.42) | (0.41) | (0.65) | (0.57) | (0.47) | (0.44) | (0.50) |

*Note.* Based on the FIML sample sizes, correlations with an absolute value > .15 (US-raised), > .19 (immigrant), > .14 (mixed-status), > .09 (overall sample) are significant at $p < .05$.

Table 6.
*Path Coefficients for Auto-Regressive Cross-Lag Model for Parents' and Youth' Familism Values With Covariates*

| | Mother-Youth | | Father-Youth | |
|---|---|---|---|---|
| Cross-Lag Estimates | *β* | *(SE)* | *β* | *(SE)* |
| Youth W1 → Parent W2 | 0.01 | (0.04) | -0.08** | (0.03) |
| Parent W1 → Youth W2 | 0.20*** | (0.07) | 0.14 | (0.07) |
| Stability Estimates | | | | |
| Parent W1 → Parent W2 | 0.44*** | (0.10) | 0.73*** | (0.06) |
| Youth W1 → Youth W2 | 0.23*** | (0.05) | 0.23*** | (0.05) |
| Main Effects – W2 | | | | |
| US-raised [a] → Parent W2 | -0.05 | (0.06) | 0.00 | (0.05) |
| Immigrant [a] → Parent W2 | -0.03 | (0.06) | 0.01 | (0.06) |
| Sibling Position [b] → Parent W2 | 0.00 | (0.01) | 0.00 | (0.01) |
| US-raised → Youth W2 | 0.06 | (0.06) | 0.10 | (0.06) |
| Immigrant → Youth W2 | -0.07 | (0.09) | -0.09 | (0.09) |
| Sibling Position → Youth W2 | 0.02 | (0.05) | 0.01 | (0.05) |
| Control Estimates | | | | |
| Adolescents' Gender [c] → Parent W1 | -0.01 | (0.04) | 0.07 | (0.04) |
| Adolescents' Gender → Youth W1 | 0.00 | (0.05) | 0.00 | (0.05) |
| Adolescents' Gender → Parent W2 | 0.03 | (0.04) | -0.03 | (0.03) |
| Adolescents' Gender → Youth W2 | -0.06 | (0.05) | -0.08 | (0.05) |
| Covariance Estimates | | | | |
| Parent W1 with Youth W1 | 0.01 | (0.01) | 0.00 | (0.01) |
| Parent W2 with Youth W2 | 0.01 | (0.01) | 0.01 | (0.01) |
| $R^2$ Parent W2 | 0.23*** | | 0.57*** | |
| $R^2$ Youth W2 | 0.11*** | | 0.10*** | |

*Note.* [a] For categorical measures of immigrant status, 1 = reference group and 0 = mixed-status (e.g. for US-raised dyads, 1 = US-raised and 0 = mixed-status). [b] Sibling position is stage of development/sibling position, 0 = adolescent/younger sibling, 1 = emerging adult/older sibling. [a] Adolescents' gender is 0 = girls and 1 = boys. W1 = Wave 1; W2 = Wave 2. *$p < .05$, **$p < .01$, *** $p < .001$

Table 7.
*Path Coefficients for Auto-Regressive Cross-Lag Model for Parents' and Youth' Respect for Elders Values With Covariates*

| | Mother-Youth | | Father-Youth | |
|---|---|---|---|---|
| Cross-Lag Estimates | *β* | *(SE)* | *β* | *(SE)* |
| Youth W1 → Parent W2 | 0.01 | (0.04) | 0.03 | (0.04) |
| Parent W1 → Youth W2 | 0.22*** | (0.07) | 0.08 | (0.07) |
| Stability Estimates | | | | |
| Parent W1 → Parent W2 | 0.42*** | (0.08) | 0.36*** | (0.08) |
| Youth W1 → Youth W2 | 0.26*** | (0.06) | 0.27*** | (0.05) |
| Main Effects – W2 | | | | |
| US-raised$_a$ → Parent W2 | 0.04 | (0.07) | -0.06 | (0.07) |
| Immigrant$_a$ → Parent W2 | -0.02 | (0.07) | -0.06 | (0.11) |
| Sibling Position$_b$ → Parent W2 | -0.01 | (0.01) | 0.01 | (0.01) |
| US-raised → Youth W2 | 0.10 | (0.07) | 0.11 | (0.07) |
| Immigrant → Youth W2 | 0.04 | (0.09) | 0.00 | (0.10) |
| Sibling Position → Youth W2 | 0.06 | (0.06) | 0.06 | (0.06) |
| Control Estimates | | | | |
| Adolescents' Gender$_c$ → Parent W1 | 0.00 | (0.05) | 0.05 | (0.05) |
| Adolescents' Gender → Youth W1 | 0.02 | (0.06) | 0.02 | (0.06) |
| Adolescents' Gender → Parent W2 | 0.15*** | (0.05) | -0.04 | (0.05) |
| Adolescents' Gender → Youth W2 | -0.07 | (0.06) | -0.08 | (0.06) |
| Covariance Estimates | | | | |
| Parent W1 with Youth W1 | 0.02 | (0.01) | 0.00 | (0.02) |
| Parent W2 with Youth W2 | 0.00 | (0.01) | 0.02 | (0.01) |
| $R^2$ Parent W2 | 0.22*** | | 0.16** | |
| $R^2$ Youth W2 | 0.14*** | | 0.11*** | |

*Note.* $_a$ For categorical measures of immigrant status, 1 = reference group and 0 = mixed-status (e.g. for US-raised dyads, 1 = US-raised and 0 = mixed-status). $_b$ Sibling position is stage of development/sibling position, 0 = adolescent/younger sibling, 1 = emerging adult/older sibling. $_a$ Adolescents' gender is 0 = girls and 1 = boys. W1 = Wave 1; W2 = Wave 2. *$p < .05$, **$p < .01$, *** $p < .001$

Table 8.
*Reliability and Criterion Validity Estimates for Youths' Report of Imitation and De-Identification*

| | Imitation | | | | De-Identifying | | | |
|---|---|---|---|---|---|---|---|---|
| | Younger Sibling | | Older Sibling | | Younger Sibling | | Older Sibling | |
| | Mother | Father | Mother | Father | Mother | Father | Mother | Father |
| **Reliability** | | | | | | | | |
| Cronbach's Alpha | .84 | .90 | .80 | .85 | .85 | .89 | .81 | .83 |
| **Criterion Validity** | | | | | | | | |
| | *r* | *r* | *r* | *r* | *r* | *r* | *r* | *r* |
| How much do you go to your mom/dad for advice or support? | .42** | .48** | .42** | .46** | -.13 | -.24** | -.24** | -.18* |
| How much do you want to be like your mom/dad? | .46** | .62** | .62** | .69** | -.33** | -.47** | -.25** | -.22** |

* $p < .05$, ** $p < .01$

Table 9.

*Correlations, Means, and Standard Deviations for Study Variables for Younger (Below the Diagonal) and Older (Above the Diagonal) Siblings*

| | **Mother-Child [a]** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **1.** | **2.** | **3.** | **4.** | **5.** | **6.** | **7.** | **8.** | **9.** |
| 1. Anglo Incongruence | - | -.07 | -.08 | .20 | -.05 | .01 | -.67 | .25 | .43 |
| 2. Mexican Incongruence | -.09 | - | -.16 | .03 | -.15 | .13 | -.03 | -.10 | .11 |
| 3. Imitation | -.07 | -.07 | - | -.16 | .50 | -.17 | .01 | -.14 | .11 |
| 4. De-Identification | .17 | -.02 | -.11 | - | -.14 | -.01 | -.22 | .02 | .20 |
| 5. Warmth | .04 | -.03 | .41 | -.11 | - | -.06 | .05 | -.03 | -.02 |
| 6. Adolescents' Gender [b] | .03 | .22 | -.24 | .03 | -.05 | - | -.01 | -.06 | .06 |
| 7. US-Raised [c] | -.68 | .05 | .00 | -.21 | .05 | -.05 | - | -.43 | -.59 |
| 8. Immigrant [c] | .22 | -.10 | -.10 | .02 | -.08 | .01 | -.35 | - | -.48 |
| 9. Mixed-status [c] | .47 | .03 | .08 | .18 | .01 | .04 | -.68 | -.48 | - |
| Younger Sibling | | | | | | | | | |
| Mean | 1.09 | 0.49 | 3.51 | 2.79 | 3.94 | 0.49 | 0.35 | 0.19 | 0.47 |
| (SD) | (0.88) | (0.62) | (0.86) | (0.76) | (0.71) | (0.50) | (0.48) | (0.39) | (0.50) |
| Older Sibling | | | | | | | | | |
| Mean | 1.04 | 0.44 | 3.44 | 2.84 | 3.96 | 0.50 | 0.35 | 0.26 | 0.39 |
| (SD) | (0.83) | (0.65) | (0.87) | (0.73) | (0.79) | (0.50) | (0.48) | (0.44) | (0.49) |
| | **Father Child [a]** | | | | | | | | |
| | **1.** | **2.** | **3.** | **4.** | **5.** | **6.** | **7.** | **8.** | **9.** |
| 1. Anglo Incongruence | - | .00 | -.18 | .22 | -.05 | -.02 | -.50 | .16 | .32 |
| 2. Mexican Incongruence | -.03 | - | .07 | -.04 | .07 | .17 | -.05 | -.23 | .24 |
| 3. Imitation | -.10 | .10 | - | -.21 | .42 | .05 | .21 | -.21 | -.01 |
| 4. De-Identification | .26 | -.05 | -.18 | - | -.27 | .02 | -.19 | .03 | .16 |
| 5. Warmth | -.07 | .16 | .36 | -.20 | - | .04 | .00 | -.03 | .02 |
| 6. Adolescents' Gender [b] | .02 | .20 | -.03 | .01 | .05 | - | .03 | -.06 | .03 |
| 7. US-Raised [c] | -.55 | -.03 | .13 | -.23 | .02 | -.02 | - | -.41 | -.58 |
| 8. Immigrant [c] | .15 | -.18 | -.11 | .11 | .01 | .01 | -.33 | - | -.50 |
| 9. Mixed-status [c] | .39 | .17 | -.03 | .12 | -.03 | .01 | -.68 | -.50 | - |
| Younger Sibling | | | | | | | | | |
| Mean | 0.91 | 0.29 | 3.24 | 2.86 | 3.84 | 0.49 | 0.32 | 0.19 | 0.49 |
| (SD) | (0.84) | (0.62) | (1.01) | (0.79) | (0.78) | (0.50) | (0.47) | (0.39) | (0.50) |
| Older Sibling | | | | | | | | | |
| Mean | 0.81 | 0.22 | 3.25 | 2.92 | 3.59 | 0.50 | 0.32 | 0.26 | 0.42 |
| (SD) | (0.81) | (0.64) | (1.00) | (0.75) | (0.98) | (0.50) | (0.47) | (0.44) | (0.49) |

*Note.* [a] Younger siblings' correlations appear below the diagonal and older siblings' correlations appear above the diagonal. [b] Adolescents' Gender is 1 = boys and 0 = girls, [c] For categorical measures of immigrant status, 1 = reference group and 0 = everyone else (e.g., for US-raised dyads, 1 = US-raised and 0 = everyone else). Based on the Multiple Imputation sample size of $n = 246$, correlations with an absolute value > .13 are significant at $p < .05$.

Table 10.
*Standardized Estimates for Mother-Child and Father-Child Models Predicting Imitation and De-Identification from Parents*

| Parent | Mother | | Father | |
|---|---|---|---|---|
| **Predictive Paths** | *β* | *SE* | *β* | *SE* |
| Imitation on | | | | |
| Parent-Youth Warmth | 0.44*** | (0.05) | 0.39*** | (0.05) |
| Adolescents' Gender [a] | -0.19*** | (0.05) | -0.02 | (0.05) |
| US-raised [b] | -0.07 | (0.06) | 0.12* | (0.05) |
| Immigrant [b] | -0.12* | (0.06) | -0.09 | (0.07) |
| Stage of development/Sibling Position | -0.02 | (0.04) | 0.07 | (0.05) |
| De-Identification on | | | | |
| Parent-Youth Warmth | -0.13* | (0.06) | -0.24*** | (0.06) |
| Adolescents' Gender | -0.00 | (0.06) | 0.04 | (0.06) |
| US-raised | -0.24*** | (0.07) | -0.22*** | (0.06) |
| Immigrant | -0.09 | (0.06) | -0.04 | (0.06) |
| Stage of development/Sibling Position | 0.04 | (0.05) | 0.01 | (0.05) |
| **Covariances** | | | | |
| Warmth With Adolescents' Gender | -0.05 | (0.05) | 0.04 | (0.04) |
| Warmth With US-raised | 0.05 | (0.05) | 0.02 | (0.05) |
| Warmth With Immigrant | -0.05 | (0.05) | -0.03 | (0.06) |
| Warmth With Sibling [c] | 0.01 | (0.04) | -0.14*** | (0.04) |
| Adolescents' Gender With US-raised | -0.03 | (0.05) | 0.00 | (0.05) |
| Adolescents' Gender With Immigrant | -0.02 | (0.04) | -0.03 | (0.04) |
| Adolescents' Gender With Sibling | 0.01 | (0.04) | 0.01 | (0.04) |
| US-raised With Immigrant | -0.39*** | (0.03) | -0.37*** | (0.03) |
| US-raised With Sibling | 0.00 | (0.00) | 0.00 | (0.00) |
| Immigrant with Sibling | 0.09*** | (0.02) | 0.09*** | (0.02) |
| Imitation with De-Identification | -0.12* | (0.06) | -0.09 | (0.06) |
| **R-Squared** | | | | |
| Imitation | 0.26*** | | 0.19*** | |
| De-Identification | 0.07* | | 0.11*** | |

*Note.* [a] Adolescents' gender is 0 = girls and 1 = boys, [b] For categorical measures of immigrant status, 1 = reference group and 0 = mixed-status (e.g. for US-raised dyads, 1 = US-raised and 0 = mixed-status). [c] Sibling is stage of development/sibling position, 0 = adolescent/younger sibling, 1 = emerging adult/older sibling.
*$p < .05$, **$p < .01$, *** $p < .001$

Table 11.
*Standardized Estimates for Mother-Child and Father-Child Models Predicting Anglo and Mexican Cultural Incongruence*

| | Mother-Child | | Father-Child | |
|---|---|---|---|---|
| **Predictive Paths** | *β* | *SE* | *β* | *SE* |
| Anglo Cultural Incongruence on | | | | |
| Imitation | -0.02 | (0.06) | -0.10 | (0.08) |
| De-Identification | 0.19*** | (0.06) | 0.21*** | (0.06) |
| Stage of development/Sibling Position | -0.05 | (0.04) | -0.08$^{\dagger}$ | (0.04) |
| Mexican Cultural Incongruence on | | | | |
| Imitation | -0.12$^{\dagger}$ | (0.06) | 0.06 | (0.07) |
| De-Identification | -0.00 | (0.06) | -0.01 | (0.06) |
| Stage of development/Sibling Position | -0.04 | (0.06) | -0.07 | (0.04) |
| **Covariances** | | | | |
| Sibling$_a$ With Imitation | -0.03 | (0.05) | 0.01 | (0.05) |
| Sibling With De-Identification | 0.03 | (0.05) | 0.05 | (0.05) |
| Imitation with De-Identification | -0.15* | (0.06) | -0.20*** | (0.06) |
| Mexican with Anglo Incongruence | -0.08 | (0.09) | 0.01 | (0.07) |
| **R-Squared** | | | | |
| Anglo Cultural Incongruence | 0.04$^{\dagger}$ | | 0.08* | |
| Mexican Cultural Incongruence | 0.02 | | 0.01 | |

*Note.* $_a$ Sibling is stage of development/sibling position, 0 = adolescent/younger sibling, 1 = emerging adult/older sibling.
$^{\dagger}p < .08$, *$p < .05$, **$p < .01$, *** $p < .001$

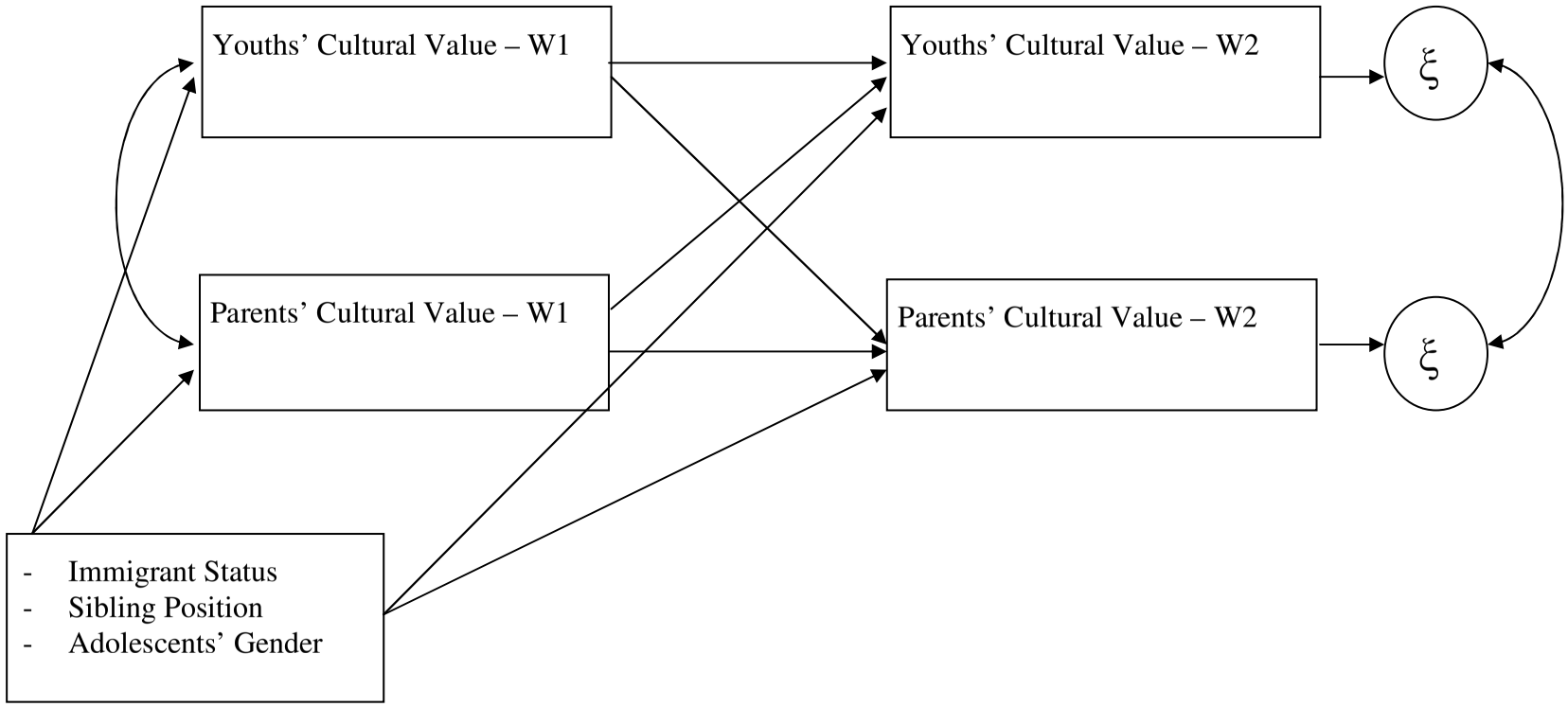


*Figure 1.* Auto-regressive Cross-lag Panel Model Measuring the Direction and Strength of Parent-Youth Influence on Cultural Values